

Managing Change:
Tensions between Urban Morphology and Everyday Life in
the Heterotopic Urban Context of Tainan

Wei-Kuang Liu

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DECLARATION

This thesis has been written by Wei-Kuang Liu and has not been submitted for any other degree or professional qualification except as specified.

ABSTRACT

Urban conservation and development practices are often in conflict. This thesis examines this general claim in the context of rapid urban development in East Asia through an analysis of the postcolonial historic city of Tainan, in Southern Taiwan. Following a particular line of urban conservation scholarship (Ashworth, Larkham, Conzen) this thesis argues that urban conservation is best conceived as the management of urban change, and that change should be considered as part of urban conservation policy. The aim of such urban conservation practice would be not only to maintain the historic traditions of a place, but also to promote the development of new possibilities of place. In this sense, the treatment of historical urban fabric should aim to preserve memory and tradition as much as serving as an ‘incubator’ for new senses of place. To this end, the thesis seeks to combine morphological and everyday life approaches to urban scholarship. A sense of place is not only derived from the emotional feelings, orientation or identity attached to an existing environment, but also relies on the practices of everyday life. These practices are significant aspects of urban places, but they are often difficult to map, measure and analyse. Thus, the thesis argues, mapping the morphological changes of a city is not enough for a rounded study of the everyday life dimensions of urban space. As a result, this thesis proposes that empirical approaches to everyday life are as important as morphological studies when exploring issues of urban change.

The thesis builds on a number of existing approaches to this wider issue of the interrelationship between urban morphology and everyday life. In particular, it examines the Versailles School’s approach to typomorphological study. This approach to urban analysis emphasizes morphological change and its grounding in existing typological rules of everyday space, so as to continue the everyday life culture that it supports. This thesis develops methodologies based on these principles. In

addition, it draws on the concepts of time-geography and heterotopic spaces as a means of specifying the representational approaches to everyday life narratives and an understanding of postcolonial complex urbanism, respectively. Following this approach, this thesis presents a series of case studies on the historic city centre of Tainan, the ancient capital of Taiwan. As a result of its colonial past, the urban blocks in that city can be understood as heterotopias in the contemporary city. Drawing on the case studies, this thesis argues that the everyday life-style in Tainan city centre is inseparable from the existing block typology and the functional conditions that reside in the coexistence of the historical and the modern urban structures. Thus, when considering urban conservation policies, the relationship between this social spatial condition and the everyday life that it supports must be carefully considered.

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TABLE OF CONTENTS

Abstract	iii
Acknowledgements	v
Chapter 1 Introduction	1
1.1 Background	1
Urban Conservation in Taiwan	2
Questions regarding the Conservation of Traditional Alley Fabric in Central Tainan	5
1.2 Everyday Life, Morphology and Urban Conservation: An Interdisciplinary Approach to Urban Change	7
Urban Conservation and Urban Change	9
Urban Morphology and Urban Change	11
Everyday Life and Architecture	12
Summary	14
1.3 Aim and Framework of the Study	15
Part 1: Formation of Urban Theory	19
Part 2: Approaches and Case Studies	20
Part 3: Discussions and Conclusions	20
Chapter 2 Conservation as Management of ‘Sense of Place’	23
2.1 Significance of Conservation	23
What Is Conservation?	24
Why Is Conservation So Important?	27
2.2 Scope of Conservation Object	31
2.3 Views of Other Disciplines on Conservation	34
Cultural Heritage	34
Sense of Place	36

2.3 Limits of Urban Conservation	39
Chapter 3 Study of Urban Changes: Typomorphology	41
3.1 Conzenian School	44
Analytical Approach	45
Subsequent Researches on Management Approach	52
3.2 Muratorian School	54
Analytical Approach	56
Conceptual Comparison	63
3.3 Versailles School	66
Analytical Approach	68
Urban Design as a Means of Management of Urban Change	78
3.4 Summary	79
Chapter 4 Approaches to Contemporary Everyday Urbanism: Everyday Life Narrative and Heterotopia	83
4.1 Conceptualization of the Everyday	87
The Analytical Approach to the Everyday	90
4.2 Heterotopia and Urban Change	100
Heterotopia as an Approach to the City	103
Heterotopia and Alienation	107
Summary	111
Chapter 5 Approaching Tainan: Historical and Everyday Urban Methodologies	113
5.1 Framework for the Study of Typomorphology	114
Morphology and Historical Periodization	114
Historical City Centre and Fringe Belt: Geographical Condition in Morphology	117
Conditions and Limitations of Morphological Data	119

Mapping the City	120
5.2 Envisioning Everyday Life in Time-Geography	133
Visual Methodologies	134
Photographic Conditions and Limitations	142
Practice of Empirical Observation	144
Chapter 6 The Urban Formation of Tainan	155
6.1 Urban Morphology of Tainan before 1895	156
Dutch Colonial Period (1624-1661)	158
The Period of Koxinga (1661-1683)	160
The Domination of the Qing Regime (1684-1895)	164
6.2 Islandization: Changes after 1895	175
The Initial Stage of the Japanese Colony (1895-1910)	176
The City Improvement Plan and Its Influence (1911-1945)	179
Postcolonial Urban Development (1945-2010)	185
Chapter 7 Urban Blocks: The Transformation of Everyday Spaces in Tainan	191
7.1 Composition of an Urban Block	194
Occupation of an Urban Block	196
Land Ownership	197
7.2 The Morphology of the Yonghua Temple Urban Block	198
Yonghua Temple and Its Surroundings in Pre-modern Tainan	198
The Yonghua Temple Block and Its Surroundings in Modern Tainan	203
Comparative Examination of Morphological Changes in the Yonghua Temple Block	204
7.3 The Morphology of the Zonggan Temple Urban Block	205
Zonggan Temple and Its Surroundings in Pre-modern Tainan	206
The Zonggan Temple Block and Its Surroundings in Modern Tainan	209
Comparative Examination of Morphological Changes in the Zonggan Temple Block	211

7.4 The Morphology of the Haian Temple Urban Block	211
Haian Temple and Its Surroundings in Pre-modern Tainan	212
The Haian Temple Block and Its Surroundings in Modern Tainan	215
Comparative Examination of Morphological Changes in the Haian Temple Block	216
Chapter 8 Empirical Observations of Everyday Life in the Urban Blocks of Central Tainan	221
8.1 One Day in the Life of the Temple Courtyard	222
Use of the Yonghua Temple Courtyard	223
Use of the Zonggan Temple Courtyard	224
Use of the Haian Temple Courtyard	226
Comparison of the 24-Hour Uses of the Three Temple Courtyards	228
8.2 Everyday Life Narrative in the Temple Courtyard	229
Pass-Through Traffic	230
Parking	234
Visiting Surrounding Facilities	237
Leisure and Exchange	239
Chapter 9 The Interrelationship between Urban Morphology and Everyday Life in Central Tainan	255
9.1 Morphology and the Resulting Condition of Social Practice	257
City Centre and Fringe Belt	257
Islandized Urban Elements	258
Organization of an Urban Block	259
Heterogeneous Condition	261
9.2 Temple Courtyard: Social Core of an Urban Block	262
Configuration of a Temple Courtyard Space	263
The Case-Study Temple Courtyard Spaces	264
9.3 Everyday Social Practice in the Temple Courtyard	267

Time-Fluxation of Cultural Appropriation	267
Interaction between Morphology and Everyday Life of a Temple Courtyard Space	269
Summary: The Impact of Spatial Morphology on Everyday Social Practice in the Interior of an Urban Block	275
 Chapter 10 Heterotopic Urbanism and the Management of Urban Change	 279
10.1 Postcolonial Heterotopias of Central Tainan	280
Principles of Urban Heterotopias	281
Incubation of Heterotopic Urbanism	288
10.2 Practical Considerations in Urban Change Management	289
Sense of Place of Central Tainan	289
Urban Conservation and Management	292
10.3 Conclusion	294
Archive of Tainan	296
Approach to Urban Change for Further Studies	297
 Appendix	 299
Bibliography	347

INTRODUCTION

[For] those people in once-colonized countries, the discussion of spatial transformation related to ‘coloniality’ and ‘modernity’ is an ongoing spatial writing – a continuous dialogue between body, space and text.

(Wu 2007: 255)

1.1 BACKGROUND

Tainan is the ancient capital and the oldest city of Taiwan. The historical urban area of Tainan is maintained in the present-day city centre and is populated with rich cultural assets. Today in Taiwan, the city centre areas are normally zoned for high density commercial development and are where residential and commercial mixed-use functions can often be found. In the case of Tainan, the actual residential population density in the commercial city centre is relatively high. The main traffic system of central Tainan today relies on the modernist structure of grids and circuses planned and constructed during the Haussmann-like urban reformation of the Japanese Colonial Period (1895-1945). But in the interior of the urban blocks created by this colonial urban structure we still find the labyrinthine alley ways and fabric of the pre-colonial city. Consideration of how to support the balance of residential and commercial conditions in this high-density city centre and at the same time to protect the historical character of the urban fabric is an important task for the future development of Tainan’s city centre.

Based on this consideration, urbanist Shih-Ming Chen and I, at a conference in 2005, argued for the importance of protecting the traditional fabric of alley ways in the interiors of the urban blocks in the

city centre of Tainan by urban design strategies for the maintenance of this city centre's sense of place.¹ That conference paper is particularly important as it was the stimulus for this thesis. At that time, we considered that the traditional fabric in the interior of an urban block had historic value and that the labyrinthine alleys with their varied widths and shifting vistas also provided unique cultural landscape characteristics. The then urban planning system, however, did not take such cultural landscape characteristics into account. The planning regulations did not stipulate consideration of the existing morphological condition in the development proposals for Tainan's inner city urban blocks. The planning of the high-density commercial zone profoundly, and negatively, transformed the existing sense of place. Therefore, in that paper we proposed that the city planning authorities adopt two urban design principles for the protection of this sense of place. First, the control of the building line on the exterior of the block was considered to be necessary. In order to protect the existing cultural landscape characteristics of the urban fabric, the buildings inside an urban block would be better without front yards or any transitional open spaces (such as patios, private gardens and so on) before the entrances; these open spaces should be located at the rear of the buildings. Second, although the planning of the high-density commercial zone allowed a high floor-area ratio development, the building heights alongside the traditional alleys should be controlled in order to maintain the visual quality of the sense of place. These suggestions were inspired by some of the urban conservation projects in Taiwan at that time.

Urban Conservation in Taiwan

¹ See Wei-Kuang Liu and Shih-Ming Chen (2005), 'Research on Mass Control of Building Renovation in Tainan City Historical Central District: A Case Study on the Block of Yonghua Temple of the Confucius Temple Historical Area in Tainan', in *the 17th Conference on the Issue of Architecture Research*, Taiwan: Architecture Institute of the ROC, pp. 837-842. The argument of the paper was based on a series of postgraduate researches, including those of Kwang-Chin Huang (1997), Chi-Tai Huang (2001), Wen-Li Lo (2004), Yi-Hung Tsai (2002) and others (their research topics were purposely arranged for the project.) Although we were concerned with the feeling and atmosphere of the alley-based spatial configuration context inside an urban block, in the argument we did not use the term 'sense of place'. Since in the English-speaking world, as will be explained in Section 1.2, the term 'sense of place' is already used by scholars to describe this condition, I shall use this term throughout this thesis.

Urban conservation movements in Taiwan started from the late 1980s. At that time, due to rapid economic growth, cities were being rapidly transformed under modernist planning approaches. With the rise of local consciousness and nostalgia for old ways of life, many cultural conservation movements were also set in motion to resist the then urban planning practice. Conflicts between urban development and conservation were frequently caused because people could not reach a compromise in the understanding of the social values that were attached to urban elements. The story of the Losheng Sanatorium in the Xinzhuang area of Taipei is perhaps one of the best-known examples of this in Taiwan in the last decade. The sanatorium, built by the Japanese in 1929, was the first and the only government-run health-care institution in Taiwan that was focussed on the treatment of leprosy. With its Gothic-style buildings and Japanese-style gardens, the sanatorium, located in the heart of Xinzhuang, encapsulated a sense of collective memory in the place. However, due to the demands of the Taipei Mass Rapid Transit (MRT) development, and the construction of Xinzhuang MRT Station, the elegant buildings and gardens were destined for destruction. Many local residents agreed with the government that the development of the MRT station would help the transportation link between the Xinzhuang area and the city centre of Taipei, stimulating regional economic growth and an increase of land values. But for some scholars, such as Ke-Chiang Liu and Yu-Cheng Chen (2007), and for people who had intimate interaction with the sanatorium, these Gothic-style buildings and Japanese-style gardens not only had significant historic and cultural values in themselves, but also provided great open spaces for the region and a sense of collective memory. After several years of continuous disputations, many of the buildings (the most remarkable parts) were finally nominated as ‘historic buildings’ and the wider area as a ‘cultural landscape’ in 2009, to be protected by law and redeveloped for public use. Not all buildings survived, and some others were destroyed for the MRT station construction. The sanatorium function was relocated to nearby modern hospital buildings.



Figure 1.1 Historical building façades of Dihua Street in Dadaocheng historic zone (photograph (left): <http://commons.wikimedia.org/wiki>, accessed 10 September 2010; diagram (right): <http://www.planning.taipei.gov.tw>, accessed 11 March 2006)

Another example of the tension between development pressures and conservation values is the Taipei Dadaocheng historic zone, one of the earliest urban conservation projects in Taiwan. Dadaocheng was the most important trading centre of north Taiwan in the late 19th century, and one of the most bustling areas of Taipei in the Japanese Colonial Period. The beginning of this conservation project, in the late 1980s, also experienced conflicts and disputations between the demands for street widening for the improvement of traffic flow on the one hand, and for the protection of historic buildings on the other. Today, the entire historic zone is protected by law and the streets are conserved as pedestrian zones. In addition, the development of the regional landscape context is controlled by urban design regulations. The forms of the new urban infill elements must follow various rules that are determined according to the configuration of the historical building context so as to work coherently with the existing context. The urban design regulations control not only the building massing, but also the façade characteristics (Figure 1.1).² Under the building massing control rules, the buildings in the conservation zone are not

² See Chao-Chin Yu (1990) for Dadaocheng historic zone conservation and urban design concepts.

permitted to have front yards; the open spaces have to be located at the rear of the buildings. The heights of surrounding buildings are also controlled so as to protect the visual quality of the urban context. This project was indeed one of the key inspirations for my arguments in the 2005 conference paper for the protection of the traditional alley fabric and the sense of place in the city centre of Tainan.

Questions regarding the Conservation of Traditional Alley Fabric in Central Tainan

Although my 2005 conference paper on the conservation of the traditional alley fabrics inside urban blocks in the city centre of Tainan looked sound, I always felt that there was something missing in the foundation of the argument of that paper.

First, most of the buildings around the alleys in the city centre of Tainan were rebuilt after the Japanese Colonial Period. Thus, unlike Losheng Sanatorium and Dadaocheng, which have elegant historic buildings and an integrated historical landscape context, the buildings in an urban block in central Tainan, as can be seen in Figure 1.2, do not really show immediate significant historic values. People were often confused when I mentioned this conservation idea because there are hardly any significant historic buildings to be preserved there. However, my sense was that the labyrinthine alley fabric itself, rather than individual buildings, constitutes a unique cultural characteristic and contributes to the sense of place of Tainan. The historic value of this place therefore resides in the forming process of its contemporary sense of place, rather than in the buildings themselves. This consideration is so important to the argument for conserving the traditional alley fabric, but has never been emphasized in conventional urban and architectural conservation debates. This set of issues led me to ask: what is the historical social background to the formation and transformation of this urban fabric? What is the role of the spatial morphology in the history of the city? What is the role of the

traditional alley fabric in future urban change? And how might we explore the historical social background attached to the urban morphology in the city centre of Tainan?



Figure 1.2 West exterior of Yonghua Temple urban block (top left); east exterior of Yonghua Temple urban block (top right); the alley spaces somewhere in the interior of Yonghua Temple urban block (bottom left and bottom right) (author's photographs)

Second, I considered that such a traditional alley fabric has to be conserved not only because it has a unique cultural character and sense of place, but also because the morphological condition of that fabric has an intimate relationship with the everyday lives of those who continue to live and work there today. In other words, in conservation practice, the continuity of the unique everyday urbanism of central Tainan is as important to the maintenance of the sense of place. For the residents of central Tainan, the alley fabric has always been part of their everyday memory. I was born and grew up in this environment. When I was a primary-school child, some classmates and I explored these labyrinthine

alleys everyday after school and we enjoyed this adventure. The geometry of the alleys was tortuous. They were sometimes quite wide, and sometimes so narrow that they could only be passed through by one person. The paths sometimes sloped up, and sometimes followed a stair down. They were unpredictable. We often tried different paths in the alleys, got lost or encountered a cul-de-sac occasionally. We never wearied of this adventure because there was always another mystery world inside another urban block. Other people may have different experiences from mine. Most importantly, these alleys and the urban spaces they defined provided a common background of everyday cultural experience in the very heart of Tainan's city centre.

Such considerations have laid the foundation for the development of this thesis. By understanding the interaction condition between everyday life and urban morphology in the city centre of Tainan, I hope to provide a more convincing foundation for the management of future urban change. This proposal will not only suggest the protection of the historic value of the traditional alley fabric, but also the maintenance of a unique everyday urbanism.

1.2 EVERYDAY LIFE, MORPHOLOGY AND URBAN CONSERVATION: AN INTERDISCIPLINARY APPROACH TO URBAN CHANGE³

The considerations introduced above in Section 1.1 expose the fact that the conventional urban conservation concept is not always adequate for the management of urban change and ensuring cultural continuity, especially in a postcolonial city or a city with a complicated historical-cultural background. As I have suggested, this is because the cultural characteristics of contemporary everyday spaces in such cities are often difficult to grasp merely by examining their historical cultural values.

³ This section is adapted from my paper published in Liu (2009).

So I shall first outline the limits of urban conservation and then set out my hypothesis for an approach to urban change.

Urban change is an inevitable process of urban growth, yet it must be properly managed so as to maintain the overall cultural character of a place, which is understood to be a 'sense of place'. 'Sense of place' and cultural identity have been prominent subjects in urban scholarship on place due to concerns from earlier work by scholars such as the geographer Edward C. Relph (1976) over the placelessness of modernism. Others have stressed that places are constructed by individual stories and leave 'traces', and in this sense are never 'finished' but always 'becoming' (Pred 1984: 279). Thus, as Lucy Lippard noted, the identity of a place will never be assimilated into a broader outlook favouring a global focus as long as such everyday cultural effects exist (1997: 20). Since the concept of place is not constant, it implies inevitable change. This has caused conflicts and tensions over discussions of the issue of change. What is to be conserved? What is to be changed? How much can be changed? In order to maintain a 'sense of place' while allowing urban change, these questions are increasingly discussed in the urban policy-making process. Regarding the management and examination of such tensions, urban conservation and morphology appear to be the most significant approaches. They examine the meanings of urban elements by focussing on the material transformations of an urban form and its past socio-cultural setting so as to provide decision-making criteria for urban development. That is to say, both urban conservation and morphology search for the nature of the 'sense of place' through the cultural-historical context of a place. However, is the cultural form of a place merely the effect of history? In some places, the everyday life style that creates a certain cultural character is separate from the history of the place. For instance, in many Asian cities, chaotic neon signboards with modern skyscrapers and a large number of motorbikes in the streets create distinctive urban cultural atmospheres. Such atmospheres are mainly embedded in everyday narratives rather than in the material history of an urban fabric. The responses of society to urban symbolic systems

also provide significant cultural meaning to place (Panerai *et al.* 2004: 124). Since urban conservation is the primary approach to the management of urban change, once the built form of a place is regarded as having historical value, most of the everyday cultural character that it supports will be threatened in order to maintain the authenticity and integrity of its historical 'sense of place'; once they are regarded as having no historical value, these fabrics and characteristics can be arbitrarily changed. Although today's life-styles are often more influential than historical traditions in creating the sense of a place, they are generally regarded as being passive in relation to urban development.⁴ In order to discuss further the role of such an everyday sense of place in the management of urban change, I will argue that explorations must involve not only works on urban history and conservation, but also studies of cultural geography and architectural phenomenology. Before probing the issues of the everyday sense of a place, the following subsections will briefly examine the concepts of urban conservation and morphology.

Urban Conservation and Urban Change

'Urban areas must change, or they will stagnate' (Larkham 1996: 3). As urban historian Peter Larkham states, urban change is evidently an inevitable process for urban growth. Yet we do not destroy entire an existing fabric in order to bring about this change, as we always maintain memorable and valuable properties of that fabric. Thus, there is always a tension between continuity and change in the city. In this case, we must have a proper mechanism to deal with such tension. How do we decide if particular structures are valuable? For whom do we conserve them? Urban conservation is thus the philosophy by which to manage such decision-making issues; it also provides a political approach to the selection processes that ultimately shape our cultural heritage (Tunbridge and

⁴ A sense of place is always inseparable from the practice of everyday life, but can be separate from the historicity of a place. See Doreen Massey (1997)

Ashworth 1996: 8-9). It functions through the process of prolonging the lives of valuable cultural assets by nominating them as 'heritage' while allowing other elements deemed unimportant for conservation to disappear in order to stimulate urban growth. Since heritage is therefore determined by selection, it becomes a commodity for popular consumption. Thus, the criteria for the selection process must be founded on present-day social values (Ashworth 1994: 15-16). In other words, the intrinsic values of the heritage, whether in memory, aesthetics, use or identity, are in fact judged by today's outlook. Heritage is hence conserved for contemporary political, cultural and economic purposes, or for everyday social demands. Since these values are contingent upon changes in social values, heritage cannot be a constant concept. While it is not a constant concept, heritage is necessarily connected to its historicity or past cultural contexts, as it refers to elements from the past and accumulated cultural productivity, typically represented by high culture values, as well as the 'collective memory' of a place (Tunbridge and Ashworth 1996: 1-2).

Moreover, the aim of urban conservation is to decide the overall character of a place so as to suggest the precursors for the long-term nature of the city (Larkham 1996: 17-18; Rodwell 2007: ix). Urban conservation is thus often considered as the most appropriate approach to manage the cultural characteristics of an urban landscape. As a result, the concept of heritage involves not only tangible historical fabrics, but also intangible cultural traditions as well as a sense of place so as to maintain the *genius loci* of a given environment. Since heritage must have historical value, sense of place is often understood as the human emotional feelings for the overall traditional character, national identity, or existing socio-cultural atmosphere of a place (Ashworth and Graham 2005: 3; Conzen 1967: 56-57; Jivén and Larkham 2003: 68-70). In addition, the concept of sense of place has also been much appreciated because of its respect for the conditions of heritage's authenticity and integrity in contemporary conservation practice. In general, issues of authenticity only emerge when the object is a finished commodity or a static element (Harvey 1996: 302; Jokilehto 2006: 9). Since the concept of

place is not constant, we might think that it is impossible to identify the authentic character of a place. However, as Gunila Jivén and Peter Larkham have indicated, sense of place provides the profile of the overall character of a place and is a valuable concept for assessing its authenticity (2003: 78). Here, the measure of authenticity allows change as long as this profile still links to its traditional character. Furthermore, the integrity of sense of place must be persistently protected. Contemporary urban conservation practices thus manage urban change in such a manner as to achieve the aim of cultural continuity while allowing change to happen.

Urban Morphology and Urban Change

Urban morphology is the study of the historical geography of the urban form. It focuses on the process and agents of change so as to identify the morphological character of the city as well as its *genius loci*, or sense of place.⁵ Thus, in this intellectual framework, the historical socio-cultural context of a city is very influential on its morphology. Studies in urban morphology assist us to understand the role of urban elements in contemporary development so that we might have a foundation for presumptions in discussions of the issues of urban change. Since morphological studies can help us to identify the present-day values of historical elements, they often act as an important analytical device for urban conservation practices. According to M.R.G. Conzen, perhaps the best-known author on urban morphology in the UK, the cityscape is like a palimpsest; it shows the historical socio-cultural stratification created through a repeated process in which parts of the existing fabric are replaced with new urban elements while other parts are maintained (2004: 51). The overall urban form is therefore the representation of the synthesis of the socio-cultural contexts of each historical period. Thus, for Conzen, the shape of a city is inseparable from its social traditions. In addition, in order to show

⁵ The term 'sense of place' is widely and interchangeably referred to as the *genius loci*. See Jivén and Larkham (2003: 79).

respect for such a process of morphological change, schemes for recycling old spaces for new functions are constantly suggested so as to equip the place for modern life while protecting its sense of place (Conzen and Whitehand 1981: 84-85).

In the Conzenian approach, we can grasp the morphological characteristics of a city by mapping its historico-geographical attributes as manifest in urban plans, building fabrics and land utilization patterns. These patterns can represent the socio-cultural transitions of each period, and thus can help us to grasp ‘the identification of formative processes and the geographical results in the townscape’ (Conzen 2004: 30). As a result, we can identify the spirit or symbolic character of a place according to the morphological mapping. Moreover, the study of urban morphology is not merely for identifying the historical sense of place, but also for understanding the reasons underlying urban change. Exploration of agents of change helps us to grasp the principles and logics of urban change so as to provide references for a contemporary approach to the management of urban change (Larkham 1996: 29).

Everyday Life and Architecture

The cultural character of a place is not merely derived from an analysis of its historical socio-cultural context or its material form, but also from the everyday life practices that populate it today. This aspect of this thesis brings us to a further body of literature in geography, philosophy and architectural theory that concerns itself with the everyday by attending to the relationship between built form, architecture and social practices. As Bernard Tschumi argued in his reflection on the place of programme in architecture, ‘performance art seemed a natural extension of conceptual art. These two forms of art practice echoed [the] definition of architecture: as concept and experience, or the

definition of space and the movement of bodies within it'.⁶ In this concept, the meaning of architecture resides not only in the spatial creative process, but also in the practice of human reinterpretation. Thus, architecture is not merely a backdrop for human actions, but takes part in the action itself (Tschumi 1994: 149). In this sense, although the authenticity of the architectural-physical fabric is rendered in its inherited historical form, the meaning of architecture does not only reside in this building context *per se*, but also in the everyday narratives that unceasingly renew their meaning with their own tactics. Accordingly, the nature of the cultural character of architecture is derived not only from its historicity, but also from today's everyday life practices.

Following this argument, the urban landscape with its historical sense of place protected by an urban conservation approach provides the basis for the appropriation of everyday events, while these everyday narratives endow the space with cultural meanings. We can elaborate this through the work of various scholars and commentators: as the architectural phenomenologist Christian Norberg-Schulz suggested, 'man is an integral part of the environment. To belong to a place means to have an existential foothold, in a concrete everyday sense' (1980: 23). The philosopher Michel de Certeau also argued that the everyday practice of re-appropriated space produces the cultural meaning of place (1984: 117-118).⁷ The meaning of place is thus inseparable from the practice of everyday life. The geographer Doreen Massey further emphasized that sense of place is mainly derived from contemporary human everyday life practice in a place, separate from its historicity (1997: 315-323). In other words, a sense of place is not only derived from the emotional feelings towards the existing environment, but also from the practices of everyday life. What is more, the style of human life practice is often influenced by an existing sense of place. So, as the philosopher J.E. Malpas noted, a place and its cultural context are in fact formed by each other (1999: 35-36).

⁶ Tschumi cited in Miljacki, Lawrence, and Schafer (2006: 10)

⁷ Although the meanings of 'space' and 'place' in de Certeau's explanation are the opposite of common formulations, they provide the same sense as the common ideas in other scholars' explanations.

Furthermore, Stan Allen has stressed that our everyday experience of a place through time, rather than through space, is often more noticeable because time is the most important factor that enables the stories to happen (2000: 40). When exploring issues of urban change, we should consider not only the historical time that makes past stories and traditions, but also everyday time. Unlike morphological change, the change embodied on the temporal scale of the everyday does not emphasize chronic changes but repeated changes (Lefebvre 2000 [1971]: 18). For instance, daily events such as a morning market or an evening market create repeated living experiences in specific places. We also regularly repeat certain stories, such as commuting, which generate specific social meanings around the places we experience. In addition, places with the same social function can create different social values when they are situated in different everyday moments. For example, the types of visitor to morning markets and to evening markets are different, thus producing different social meanings at those sites. Such everyday social significance cannot be shown merely by mapping the physical aspects of those markets. In fact, as de Certeau and Allen have argued, everyday human tactics are inconstant and unpredictable, and thus they are essentially unmappable (Allen 2000: 45; de Certeau 1984: 99). This observation on the limitations of mapping in the context of the study of everyday life has important methodological consequences which I will elaborate below.

Summary

As we have seen in the discussion above, a sense of place resides not only in the historicity of a given urban site, but also in the contemporary everyday context of that place. Since the everyday sense of place has an important role in the cultural vitality and identity of a city, many urban scholars and planners agree that should not always exist passively in the context of urban design policy. We implement urban conservation policy because we yearn to grasp the historic sense of place actively

and at the same time, retain an element of control over the management of its quality. But how do we manage to protect the everyday cultural character of a place? Despite the recognition of this general point in many policy and academic debates, this question demands further exploration in contexts of rapid urban change. An important consideration in such exploration is that simply conserving the everyday cultural context of a place will only restrict its capacity for change; instead, as I will argue, we should protect and foster potential ‘incubators’ of such an everyday sense of place. Especially, we must include, as Nan Ellin (2006) and Jonathan Hill (2003) suggested, the broader actual social environmental condition and the users’ spatial appropriation as the central concerns for future architectural and urban design. In other words, in the practice of managing urban change, we must take into account the interrelationship between urban morphology and the resulting practices of everyday life. To this end, this thesis will propose a methodology involving morphological mapping and various forms of temporal observation. Observation of the process and agents of everyday human tactics and their interactions with the architectural environment will help us to grasp the possibilities of what I will elaborate as incubators of a sense of place. Following the discussions throughout this section, it can be noted that a complete proposal on the management of urban change must involve both historical and everyday human experiences of the city. Therefore, when exploring the issues of urban change, empirical approaches to everyday life are as important as morphological studies. Both methods should be undertaken together in order to grasp the sense of place derived from the historical, cultural and social values of a city.

1.3 AIM AND FRAMEWORK OF THE STUDY

Following the contentions outlined above, this thesis will begin by considering three major approaches to urban morphology: the British geography-based Conzenian School; the Italian

architecture-based Muratorian School; and the French Versailles Schools. This review will serve as one foundation for the development of my approach to urban change.⁸ Although these approaches, or ‘schools’, are grounded in different disciplines – geography, architecture and sociology respectively – they share a common attitude towards the study of urban form. They all argue that contemporary urban development must be founded on the cultural patterns or logics in the past processes of urban formation and transformation. For example, according to the Muratorian typological concept, there are always some forming rules that can be found in a spatial typology for contemporary designs to follow. The spatial typology of a certain area must have a logic of combination that brings certain urban elements together that reflect the local cultural and spatial character of that place.⁹ The concept of type becomes important in this analysis as it is not only influential in the design of a single architectural form, but also in the development of the urban tissue (Caniggia and Maffei 2001). Type seeks to link architectural form to urban form as a means of supporting cultural continuities. Influenced by this Italian concept of type, Philippe Panerai, Jean Castex and Jean Charles Depaule (2004), founders of the Versailles School of typomorphology, were also concerned with the issue of spatial typology, but they also took into account empirical observation of everyday life in their approach to urban analysis. As they argued, there is always a specific relationship between urban tissue architectural typology and appropriations of everyday life.

Since the Versailles School of typomorphology considered the issues of both urban morphology and everyday life together, their approach takes a central role in the theoretical explorations of this thesis. By focussing on this approach, I hope to grasp the cultural character of urban morphology on the one

⁸ These three schools are often considered to be the most prominent schools of urban morphology and typology. See Anne Vernez Moudon (1997: 4). Their theories and approaches will be explored in Chapter 3.

⁹ Typology is a very broad concept; this thesis will mainly follow the Italian concept, especially Saverio Muratori's typological theory. In the English-speaking world, his work is mainly published in Gianfranco Caniggia and Gian Luigi Maffei (2001). Generally speaking, the French theorists A.C. Quatremère de Quincy and J.N.L. Durand were the first to apply typological study to architectural design. Although Muratori never mentioned Quatremère in his works, Quatremère's concept of type had influenced Aldo Rossi and many others and is often considered as the mainstream of typological studies. As there are similarities which can be found between the ideas of Rossi and Muratori, they are both considered to be branches of the Italian typological conceptual network.

hand, and explore the making process of an everyday sense of place on the other. But in the empirical study of everyday life, this thesis will supplement the Versailles school approach with the inclusion of time-geography and related ideas as a way of offering a refined sensitivity to the temporal aspects of everyday urban life. The concept of time-geography was introduced by Torsten Hägerstrand (1970) and has been broadly used for everyday life analysis. It is concerned with the narrative cultural model of a specific cyclic span of time, such as a typical weekday, in the practicing of a particular place. In short, this concept is useful for understanding the relationship between everyday events and the space-time in which they occur. Through the concept of time-geography, we can grasp the daily narrative by which people appropriate and practice a specific place in a given part of the urban tissue. This thesis also suggests that in the narrative of appropriation, we should pay attention to the cultural experience of everyday tactics in the making of a sense of place. Thus, we can comprehend not only the interaction between everyday life and urban morphology, but also the uniqueness of an everyday urbanism. This comprehension will provide the background for suggestions for future urban change.

While this thesis adopts the concept of morphology and typology, I do not wish to uncritically adopt the traditional (pre-modern) urban, architectural and social forms that often come with this approach. My aim is not to examine future urban development while rejecting the possibilities of modernist approaches to architecture or urbanism. It is more important to grasp the existing cultural condition than to pursue the traditional cultural context of the space. Modernist development is often considered to be an interruption of the coherent process of urban transformation, but, like colonization, modernization is in fact also part of the process by which today's city is formed. In the case of Tainan, as mentioned earlier, because of the city's colonial past, the history of the morphological process is not coherent, and thus it is a place in which the cultural value of space resides in the forming process of its contemporary sense of place, rather than in the integrity of historicity or aesthetics. Therefore, in terms of urban change, the significance for urban morphology is to help identify incubators of a

contemporary sense of place is as important as the historical social value. In this sense, I will propose that the principle of the production of social-cultural context in the complicated morphological condition is better understood through the concept of heterotopia, instead of the conventional application of typomorphological theories. Since the concept of heterotopia was introduced by Michel Foucault (1986 [1967]), it has often been used by architectural and urban theorists to explain the complicated postmodern social spatial condition. Conventional spatial analysis often suggests a dichotomous result, such as the opposition between the traditional and modernist urban social contexts. Yet the concept of heterotopia can be used to engage with the postcolonial and multicultural aspects of my project. As can be found in the thinking of scholars who adapt this concept for urban analysis, such as David Grahame Shane (2005), Michiel Dehaene and Lieven De Cauter (2008), the concept of heterotopia supports the maintenance of the socio-cultural and formal character of particular urban quarters in a state of tension, rather than resolving it towards one particular pole. This way of understanding the social, spatial and formal structure of central Tainan will help to highlight the everyday cultural context in the complicated spatial syntax that has rarely been considered, so as to allow possible urban futures to be founded on both the traditional and the postcolonial urban social structures.

This thesis will explore these general theoretical propositions by focussing upon the heterotopic possibilities which can be found in particular temple courtyard spaces contained within the interior of many urban blocks in the city centre of Tainan. In traditional Taiwanese society, a temple courtyard certainly served as an important public space of the city. However, due to the colonial urban reformation, the temple today is often hidden in the centre of an urban block. Isolated from the high-density commercial city centre, the temple courtyards can only be reached by navigating a labyrinthine alley network. The change in the social and spatial structure of Tainan has caused the temple courtyard space to be privatized as the social core of various residential neighbourhoods inside

particular urban blocks. In some of these situations, the temple courtyard space and its alley network inside an urban block can be read as contemporary heterotopias, containing new organizations of public and private space in the city fabric. This everyday cultural character cannot be grasped through the historical traditional or the modernist values of the space. Thus, the concept of heterotopia helps to highlight the complexity and contradiction in the everyday social spatial structure for conservation in future urban change.

Such a research needs a proper framework, including a rigorous theoretical foundation, case studies on the morphology and everyday life of Tainan, and a conclusion based on the concept of heterotopia, so as to suggest the principle for future urban change in the city centre of Tainan for the protection of its sense of place. Hence, this thesis will be structured in three parts.

Part 1: Formation of Urban Theory

This initial part will be unfolded over Chapters 2, 3 and 4. Chapter 2 will set out some urban conservation concepts such as ‘value of conservation’ and ‘sense of place’ which are considered important to the study. Although this thesis will not follow a conventional urban conservation approach, the motivation for this thesis was founded on the concept of urban conservation; so it is still important to understand the conceptual background of urban conservation. The theories of three major schools of typomorphology, the Conzenian, Muratorian and Versailles Schools, will be explored in Chapter 3. Then Chapter 4, founded on the Versailles School’s typomorphological concept, will explore more analytical approaches to everyday life, including the concepts of time-geography and heterotopia. These chapters will help to develop the methodologies for the case studies which follow, as well as to lay the foundation for discussions and conclusions.

Part 2: Approaches and Case Studies

Chapter 5 will be the key that activates the theoretical aspects of the thesis. The methodologies, conditions and limitations of the case studies, as well as the justification of data, will be carefully explained here. Then three case-studies (examined in Chapters 6, 7 and 8) will follow. They will explore the historical geography of the formation and transformation of the city centre of Tainan, the morphological and typological characteristics of urban blocks, and everyday life in the urban blocks of that city. These explorations will take three urban blocks – the Yonghua, Zonggan and Haian Temple blocks – as case studies. Located in the city centre, they share a common feature in that they are formed by the modernist grid structure with the traditional labyrinthine alley fabric in the interior. But their morphological backgrounds and everyday life styles are slightly different. These case studies will help us to understand the values of urban fabric and everyday life in the making of a sense of place.

Part 3: Discussions and Conclusions

Based on the descriptions of the case studies, Chapter 9 will discuss the interrelationship between urban morphology and everyday life in the city centre of Tainan. This discussion will help us to grasp the social value of contemporary everyday space. Chapter 10 will then explain the everyday social cultural character of this complicated postcolonial social-spatial structure through the concept of heterotopia, so that the cultural context residing in the states of tension and conflict can be properly grasped as means of underpinning suggested principles for future urban change.

Some of the suggestions made in this thesis for the management of urban change are similar to those that might result from a conventional urban conservation study; for example, the argument of

conserving the traditional alley fabric. However, I shall emphasize not only the historical value of this fabric, but also the significance of it serving as an incubator of contemporary and future senses of place. In addition, this thesis will also stress the understanding of the everyday social condition residing in the relationship between the traditional alley fabric and the modernist urban structure, residential and commercial, private and public conditions. I hope that the most important contribution of this thesis is not the practical suggestions such as urban design strategies for the management of future urban change, but its contribution to the comprehension of the morphological and everyday life backgrounds of the city centre of Tainan.

CONSERVATION AS MANAGEMENT OF 'SENSE OF PLACE'

Senses of place are the products of the creative imagination of the individual and of society, while identities are not passively received but are ascribed to places by people.

(Ashworth and Graham 2005: 3)

According to scholars working on urban history and conservation, such as Ashworth (1991), Jokilehto (1999) and Larkham (1996), conservation is the process of managing the tensions between continuity and change in the city, and its aim is to manage the cultural character and identity of the city. In general, as Ashworth and Graham (2005), Conzen (1967), and Jivén and Larkham (2003) have suggested, this overall cultural character and identity of a city can be understood as a 'sense of place' or *genius loci*, that is, as the response of human emotional feelings to the overall traditional character, national identity or existing social-cultural atmosphere of a place. Urban conservation is thus the action of grasping and protecting the cultural-historical character of a place for the maintenance of its place identity. The concept of urban conservation serves as the foundation and important background of the subsequent development of this thesis. Acquiring a proper knowledge of this concept and its approach to the management of a sense of place is important for this thesis. To this end, this chapter will explore the significance of conservation practice and the concept of a sense of place. This exploration will also help us to understand the limits of conservation in terms of my project.

2.1 SIGNIFICANCE OF CONSERVATION

As can be seen in the work of scholars such as Ashworth (1991), Jokilehto (1999) and Larkham (1996), 'conservation' is often considered to be the action of protecting the historicity of a city. In fact, however, in terms of the contemporary interest in cultural continuity, as I shall explore in the following subsection, 'conservation' does not refer to its literal meaning of maintaining the existing urban context in a static condition, but emphasizes the philosophy of managing the tensions between urban dynamic change so as to maintain the overall cultural character of a place. However, since urban change is a necessary process of urban evolution, why must we keep some specific existing urban fabric unchanged? The later part of this section will examine this question and explore the value of conservation practice. As we shall see, conservation is always about the decision-making process of selecting what should be conserved. It is not only the action of protecting the historicity and traditional character of a place, but also of employing the historical resources in our present-day life. Therefore, in order to properly manage tensions between continuity and change in the city, it is very important to understand the value of conservation. But before going that far, we must first understand the role of conservation as it is currently understood.

What Is Conservation?

The definitions of 'conservation' and 'preservation' are very alike according to the Oxford English Dictionary, but they have often been used to identify different actions in terms of contemporary cultural continuity movements.¹ There are still, however, a minority of scholars² who tend to use them interchangeably; most others, including those who have a particular interest in urban conservation such as John Harvey, Jukka Jokilehto, G.J. Ashworth and Peter Larkham, have

¹ In the Oxford English Dictionary (2008), 'preservation' is explained as the action of preserving from damage, decay or destruction, and 'conservation' means preservation from destructive influences, natural decay or waste; preservation of existing conditions, institutions, rights, peace, order, etc.

² Weaver and Matero suggest conservation as the action of protecting heritage from loss, depletion, waste and harm (1993: 1). This definition appears indifferent to the discrepancy.

emphasized the discrepancy between these two terminologies. In their work, the concept of conservation is understood to have a broader meaning than that of preservation, involving not only the protection of existing fabric but also the management of dynamic change.

Since today's conservation movement is founded on historical consciousness and the impact of its resulting values on living cultures, historic buildings have been understood as 'living monuments' rather than 'museums' (Jokilehto 1999: 207). Thus, as the architectural historian Harvey has suggested, the purpose of conservation practice is not to accomplish an 'open-air folk-park', but to maintain the overall traditional cultural character of a given region or urban quarter (1972: 38). In order to distinguish this consideration for maintaining a dynamic cultural context from the idea of simply freezing the historical fabric of a particular city or town, the term 'conservation' has been used exclusively in this field of work. In general, 'preservation' means the action of protecting a single structure statically in unchanged condition, whereas the term 'conservation' describes the action of maintaining and managing the entire dynamic setting for guaranteeing the continuity of living cultures (Feilden 2003 [1982]: 3; Fitch 1990: 104; Harvey 1972: 15; Jokilehto 1999: 304). That is to say, the term 'preservation' appears to imply the action of 'restoration', while 'conservation' is endowed with the aim of ensuring continued structural integrity (Fitch 1990: 46, 84, 104). Thus, in terms of conservation practice, all relevant surrounding structures must be considered and new interventions must respect the existing fabrics (Casson 1976: 150; Harvey 1972: 15). This concept of conservation is also emphasized in the Australian ICOMOS *Burra Charter* (1999), which was one of the first formal encapsulations of this wider definition of conservation. This document states that 'conservation means all the processes of looking after a place so as to retain its cultural significance'.³ In this statement, 'cultural significance' refers to 'aesthetic, historic, scientific or social value for past,

³ Article 1.4 of the *Burra Charter* (1999)

present or future generations'.⁴ Conservation is, in this formulation, not a constant concept but a result of continuing history. Accordingly, the major concern of conservation practice is the management of the dynamic cultural context in a given place.

Scholars working on urban conservation, such as Ashworth (1991) and Larkham (1996), tend to resonate with the general intention of the Burra Charter by arguing that conservation is always about the management of urban change. As Larkham put it: 'urban areas must change, or they will stagnate' (1996: 3). Even so, we do not destroy all the existing fabrics to enable change, as the fundamental living conditions of our contemporary cities must be founded on the existing historical conditions (Jokilehto 1999: 179). The cityscape is, according to this view, like a palimpsest; it shows the historical socio-cultural stratification created through repeated processes and patterns of everyday life, in which part of an existing urban fabric is replaced with new urban elements while others are maintained (Conzen 2004: 51; Crang 1998: 22). Conservation is thus the philosophy that deals with the tensions between continuity and change that are usually manifest in this palimpsestic way. It functions through the process of prolonging the lives of those valuable cultural assets by nominating them as 'heritage', while allowing others to be lost in order to stimulate urban evolution (Larkham 1996: 17-18; Tunbridge and Ashworth 1996: 3). In other words, 'heritage', as Ashworth and Graham emphasized, is that part of the past selected for present-day purposes so as to create preferable living conditions (2005: 7). The concept of conservation therefore concerns not only archaeological issues but also the urban evolutionary approach to the sustainability of living culture and the quality of human life (Rodwell 2007: ix). As a result, the practice of conservation is to determine the overall character of a place so as to suggest the precursors for the long-term nature of the city (Larkham 1992: 91-92; 1996: 17-18). This process must be regarded as part of the urban planning system and thus 'conservation' is considered to be a highly political action (Cohen 2001: 35; Stoica 2004: 96). That is

⁴ Article 1.2 of the *Burra Charter* (1999)

to say, the justifications for conservation, as Larkham suggested, must not be founded on merely subjective and emotional issues but on objectifiable evidence that can garner political support, so as to avoid conflicts with other urban planning schemes (1996: 17).

So far, the role of conservation has been explored and two questions have emerged. First, as 'urban areas must change', why is there a necessity for conserving heritage if this action will cause tensions with urban growth? Although we keep repeating 'cultural continuity or sustainability' as the aim of conservation, we have not seen any concrete evidence of its benefit. What are the values of conserving these cultural assets to the city? Second, since heritage is 'selected', it is a form of commodification for popular consumption (Ashworth 1994: 15-16; Larkham 1996: 14). How do you make decisions for the selection process? In order to respond to these two questions, we shall now explore the value of and motive for conservation.

Why Is Conservation So Important?

The development of the concept of conservation has a long history and it has evolved in conjunction with the changing social and cultural values. It is therefore necessary to explore the story of our enthusiasm for conserving heritage by reviewing the movement's historical conceptual background. This section will outline the most often cited concepts of some influential thinkers of the past, including John Ruskin, Alois Riegl and Cesare Brandi, who have played key roles in the historical conceptual evolution of conservation philosophy.

The English architectural theorist John Ruskin had a great influence on modern conservation philosophies, as he was the first person who clearly identified the values of historic architectures. In the early 19th century, the actions of restoring historic buildings often arbitrarily renewed and

reconstructed the historical fabrics and, as a result, the existing historical values were often redefined (Jokilehto 1999: 174; Rodwell 2007: 4).⁵ Ruskin criticized these works of restoration and viewed them as destructive actions because they destroyed what he regarded as important traces of past life. He argued that architecture could inscribe the life stories from the past and transmit them to the future, and that we must value and maintain those traces. Such historic value that was inscribed into built form could not be created by restorations, he emphasized (2007 [1849]: 184-207). Since then, the concept of conservation, rather than restoration, had gradually been paid more attention.⁶

Another important theorist in the formative stages of the conservation movement was the Austrian art historian Alois Riegl. He was the first person to analyse the values of heritage systematically and to emphasize heritage's practical values (Jokilehto 1999: 215). As he suggested, heritage must have present-day values reflecting the modern urban life to satisfy human needs since it was an integral aspect of the modern city. Thus, he classified the resulting values of heritage into two main groups: 'commemorative values', including age value and historical value, and 'present-day values', including use value and art value (Riegl 1998 [1903]: 631-650). In this classification, the commemorative values reflected Ruskin's thoughts on conservation. But the idea of present-day values was a fresh concept in the early 20th century. Riegl argued that an historic building should not be retired from use if it was still capable of serving modern purposes, so as to save the cost of new constructions. In addition, heritage always possessed artistic or aesthetic value, but only if it responded to the modern *Kunstwollen*⁷ so that it could satisfy modern demands for aesthetic quality. In his argument, artistic

⁵ The manner of those works was termed 'stylistic restoration', and the major proponents of this were the English architect Sir George Gilbert Scott and the French architect Eugène Emmanuel Viollet-le-Duc (Jokilehto 1999: 137-173; Rodwell 2007: 4).

⁶ Ruskin's argument then inspired William Morris to found the 'Society for the Protection of Ancient Buildings' (SPAB) in 1877 for promoting maintenance and conservative treatment in the UK (SPAB still exists today and its members are predominantly private owners of old buildings anxious to combine heritage with practicality). His idea had also influenced many scholars internationally, such as the French writer Marcel Proust, the German art historian Georg Gottfried Dehio and the Italian architectural historian Camillo Boito. Inspired by Ruskin, these people also criticized restoration works, emphasized the significance of respecting authentic historic evidences, and encouraged adequate legislation and an administrative system for their governments responsible for historical fabrics (Jokilehto 1999: 187-203).

⁷ Although 'will to art form' is one possible translation, '*Kunstwollen*' is in fact difficult to translate precisely; even

value was a relevant present-day value because heritage was perceived and identified as an art work in the present time (1998 [1903]: 639-650). Accordingly, the significance of conservation practice was, for Riegl, not only for respecting past stories but also for our present-day living quality.

The Italian art historian Cesare Brandi was perhaps the most influential conservationist in the 20th century (Jokilehto 1999: 237). According to Brandi, an artwork's originality in terms of its historical and artistic values received in the creative process must be respected (2005 [1977]: 48-49). In his words: 'a work of art is a unique object because of the unrepeatable singularity of historic events' (2005 [1977]: 65). Thus, he and Ruskin had parallel attitudes in their opposition to the idea of mere restoration. As Brandi suggested, 'only the material of a work of art is restored'; mere restoration would, following this view, simply appear historically and aesthetically false to the public (2005 [1977]: 48-49). Second, he suggested that when a building had been built, it belonged to a given landscape complex which helped determined the character of a place; as a result, the relationship of the building to this contextual setting must be maintained and conservation practice must always consider the overall character of surrounding environment (2005 [1977]: 71-75). In short, for Brandi, we should conserve heritage not only because of its historical or artistic values, but also because of the given character of the complex landscape of a place. This idea strongly influenced the subsequent development of conservation theory, especially the development of the concepts of authenticity and integrity.⁸

In the 1980s and 1990s, conservation had become extensively accepted as an important principle in architecture, urban design and planning practice and theory. According to some of the then most

English editions maintain this German term in use.

⁸ Brandi's argument was mainly inspired by Martin Heidegger (2002 [1950]), especially the concepts of 'truth' and 'being' of a work of art. The former suggests the irreproducibility of the true originality of an artwork, and the latter emphasizes the sense of being of an architecture residing in the relationship between itself and its surroundings. Brandi's theory influenced subsequent conservation conceptual development deeply. Most importantly, his theory has been a reference when writing the *Venice Charter* and many other conservation policy statements (Jokilehto 1999: 237).

influential conservationists, Sir Bernard M. Feilden (2003 [1982]), John Earl (2003 [1996]) and James Marston Fitch (1990), the practice of conservation is significant not only because heritage has historical and aesthetic values, but also because it promoted an appreciation of environmental education, place identity, functional reusability, and certain economic aspects of sustainability. These ideas have been widely supported by numerous recent scholars in more urban-related fields, including Graham, Ashworth and Tunbridge (2000), Larkham (1996), Jokilehto (1999), Choay (2001), and others. Nowadays, heritage is also often considered to one of the most significant resources for economic growth through tourism development (Ashworth 1991: 115-122; Bentley 1992: 44; Orbasli 2000: 3; Tunbridge and Ashworth 1996: 59-62). In this sense, the concept of heritage has become an important aspect of marketing places.

In sum, conservation has, according to the exploration described above, become an important aspect of all urban design and development because it is one field that encapsulates diverse values relating to memory, utility, aesthetics, identity, economy, and even education and politics of the urban realm. Thus, it appears that even if we are concerned with urban development, the formation and importance of conservation is such that it cannot be avoided. That is to say, the tensions between continuity and change in a city are unavoidable, so we must have appropriate approaches to managing such tensions. But how is the 'heritage' selected? While conservation theory suggests that heritage is selected for its relevance to our everyday life, we still require some criteria or means to establish this sense of relevance. As Ashworth suggested, the values in conservation are already obvious intrinsic criteria (1994: 15-16). In other words, we can nominate an object as 'heritage' if we assume it has historic, artistic or any others of the values mentioned above. This assumption must be based on clear evidence, or there will be controversies. The justification for conservation cannot be founded on subjective emotional demands alone (Larkham 1996: 17). Therefore, the criteria for the selection process must be as objective and clearly stated as possible so as to build knowledge of the urban environment and

reduce conflicts over an appreciation for the value of heritage.

2.2 SCOPE OF CONSERVATION OBJECT

This section will explore the broadening scope of heritage in conservation practice. As we have seen in the exploration in Section 2.1, scholars in the formative stages of the conservation movement such as Ruskin, Riegl, and Brandi did not consider the concept of place in conservation. However, place was to become an important issue in conservation practice, and is a widely used concept in this field today. This change of thinking suggests that the scope of the object of conservation has evolved from an historic building to a place, and now includes a number of less tangible aspects of material culture. Thus, the history of this evolution and the concept of the conservation as it moves to engage less tangible aspects of history will be briefly explored here.

The scope of conservation objects in the 19th century normally merely focused on 'historic monuments' or 'historic buildings', which usually referred to 'buildings of historic or artistic value'.⁹ In the words of Feilden, 'a historic building is one that gives us a sense of wonder and makes us want to know more about the people and culture that produced it'; undoubtedly, with great value in history and art, they are the symbols of cultural identity (2003 [1982]: 1). In 1896, 'monument' was broadly identified by the Italian society *Associazione Artistica Fra i Cultori di Architettura*¹⁰ as: 'any building, public or private, of any period, or any ruin, that manifests significant artistic character, or important historic memory, as well as any part of a building, any movable or immovable object, and any

⁹ The *Associazione Artistica Fra i Cultori di Architettura* argued that historic buildings or monuments were the 'buildings of historic or artistic value', or the 'buildings of interest to the history of art', and legal protection was mainly proposed for the former (Jokilehto 1999: 207).

¹⁰ The *Associazione Artistica Fra i Cultori di Architettura* (Artistic Association of Culture and Architecture), akin to SPAB, was established in Rome in 1890 for the protection of historic buildings.

fragment that manifests such character' (Jokilehto 1999: 207). Here, the terms 'movable' and 'immovable' were first used in this context. Movable heritage is referred to as 'museum collections', while immovable heritage is referred to as 'architectural heritage' (Ahmad 2006: 294). In 1964, the term 'historic monument' was still used in the *Venice Charter*, but the scope of 'historic monument' already included 'not only the single architectural works but also the urban or rural setting'.¹¹ The term was reinterpreted by ICOMOS in 1965¹² as 'monument' and 'site' to clarify the unclear explanation in the *Venice Charter*; and was reformulated again by UNESCO in 1968¹³ as 'cultural property' to regroup the concepts of 'monument' and 'site' (Ahmad 2006: 294). Here, the term 'monument' included 'all real property ... whether they contain buildings or not, having archaeological, architectural, historic, or ethnographical interest and may include besides the furnishing preserved within them'. The term 'site' was defined in this context as 'a group of elements, either natural or man-made, or combinations of the two, which it is in the public interest to conserve'.¹⁴ 'Cultural property' was replaced by the term 'cultural heritage' in the *World Heritage Convention* in 1972 to include the concepts of 'monument', 'group of buildings' and 'site'. According to the *World Heritage Convention*, 'cultural heritage' includes:

1. monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
2. groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
3. sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

(Article 1 of the *World Heritage Convention*, 1972)

¹¹ Article 1 of the *Venice Charter* (1964)

¹² ICOMOS. *Constitutive Assembly* (1965)

¹³ UNESCO. *Recommendation Concerning the Preservation of Cultural Property Endangered by Public or Private Works* (1968)

¹⁴ Article 3.1 of the ICOMOS *Constitutive Assembly* (1965)

As can be seen from the definition given above, the concept of 'groups of buildings' considers not only architectural complexes but also places. The meaning of 'site' now involves not merely a group of elements, but also areas. These definitions have been used by UNESCO ever since.

Recently, the term 'heritage' has come to be used frequently to explain various conservation objects, and, moreover, the scope of heritage is widely acknowledged by many scholars working on historical conservation, including Feilden, Jokilehto and others, to involve both 'tangible' and 'intangible' elements, as well as 'sense of place' (Ahmad 2006: 298; Blake 2000: 61-85; Brown 2005: 40-41; Feilden 2003 [1982]: 3; Jokilehto 1999: 219; Ouf 2001: 73; Stoica 2004: 92). Tangible heritage is usually referred to as cultural property which includes monument and site, as well as movable and immovable objects. According to UNESCO, intangible heritage is defined as 'the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage', and should include: oral traditions and expressions; performing arts; social practices, rituals and festive events; knowledge and practices concerning nature and the universe; and traditional craftsmanship.¹⁵ Intangible heritage is, according to this definition, 'priceless' as it includes 'ways of life and memories of traditional knowledge' that form an important cultural asset for a given place (Jokilehto 1996: 63-64). In addition, the intangible quality of a given environment enables the place to be meaningful and is one of the most important factors to produce the sense, locality and identity of the place (Warren 1996: 38). Therefore, in order to achieve the aim of cultural diversity and continuity, both tangible and intangible heritages must be respected (Jokilehto 1996: 70-71).

¹⁵ Article 2 of the UNESCO *Convention for the Safeguarding of the Intangible Cultural Heritage* (2003).

Accordingly, 'cultural heritage' is the most common term for the scope of conservation objects, and it includes physical and intangible attributes inherited from past generations, as well as the sense of place derived from the traditional character of existing built fabrics. As the *World Heritage Convention* stated, heritage includes those of outstanding universal value from the point of view of history, art, science or anthropology. Thus, it involves various significant assets of historical or traditional cultures.

2.3 VIEWS OF OTHER DISCIPLINES ON CONSERVATION

So far, we have outlined the orthodox concept of urban conservation as it has developed theoretically and as it has been applied in heritage policy. But, as will be explored subsequently, there are some different articulations of 'cultural heritage' and 'sense of place'. They are not founded on history or heritage studies but come from cultural geography, cultural studies and architectural phenomenology. These other formulations, discussed in the following section, usefully supplement and enrich the concept of place and help the study of the management of urban change.

Cultural Heritage

According to the conventional idea of conservation, cultural heritage usually refers to preserved relics, remains, places and traditions which have historical values. Yet, within the frameworks of cultural geography and cultural studies, the idea of cultural heritage has as much more significant relation to contemporary everyday life as to history and tradition. As mentioned earlier, heritage can be regarded as a form of commodification, or a process of selection for popular consumption (Ashworth 1994: 15-16; Larkham 1996: 14). That is to say, heritage is not given, it is made, and is an ethical enterprise

(Brett 1993: 186). Accordingly, presentations of historical environment can possibly fail to satisfy human needs if their present-day values are not considered carefully. The purpose of making heritage is not only for the past to speak for itself, but for its role in our contemporary everyday life; as a result, heritage must involve present-day social, cultural and psychological values (Baker 1999: 14).

So, in terms of the perspective of cultural studies, how do we judge heritage's present-day social cultural value? Since culture is the central element in composing cultural heritage, it is necessary to explore the meaning of culture in relation to our social context so as to understand the signification of heritage's social cultural value properly (Blake 2000: 68). As the anthropologist Edward Burnett Tylor has argued, 'culture is the complex whole, which includes knowledge, belief, art, moral, law, custom, and other capabilities acquired by man as a member of society' (1903: 1). Apart from the art forms of culture, such as music, literature, painting, sculpture, theatre and film, it is also concerned with lifestyle, organization of production, structure of family, and relationship of social context (Williams 1976). Thus, eating and dressing styles are part of culture; geographical and environmental features are also part of culture (Wang 2005: 15-16). To be precise, culture is not only the effect of social civilization, but also the process of social progress (Rampley 2005: 5-6). Geographer Mike Crang, for example, finds value in reiterating an older classification of culture into three categories, namely, high culture, popular culture and everyday life (1998: 3-6). High culture is the class-based taste culture of an educated elite, and it mainly refers to works of art; popular culture is more widely accessible, it requires less privilege to be appreciated, and it is popular within the social context (Bakhtin 1981: 4; Crang 1998: 1, 3-6; Hirsch 1976: 487; Rampley 2005: 7). But both high culture and popular culture are the consequences of the effect of social civilization, while culture is also about the process – the ways of human everyday life (Crang 1998: 2-6; Rampley 2005: 5-6). To be precise, culture refers to the ideological system, such as the way of life, thinking, feeling and believing, which is agreed by a certain group of people, and thus it is composed of learned behaviour (Geertz 1973: 4-12). As a result,

the concept of culture always follows changes in social values (Harvey 2001: 336).

In terms of a given place, culture is the belief or value that endows the ways of our life with specific meaning that creates the sense of place for the place in which we live (Crang 1998: 2-6). Accordingly, cultural heritage is the representation of the social values of a specific group of people. Since it is selected, it is endowed with today's social value. The concept of cultural heritage is thus inseparable from the ingrained ritual associated with the practice of everyday life (Harvey 2001: 336). In other words, the concept of cultural heritage also follows the change of everyday social values. In addition, although cultural heritage is always about the effect of culture, such as preserved relics, remains, places and traditions, with present-day social values, we should also respect its value derived from cultural process – today's everyday life-style in response to the historic fabric. Although the movement of spatial appropriation is dominated by the historical environmental context, its narrative form and concept are not the effect of history – it also always follows the change of social context. The everyday narrative of appropriation provides great vitality and diversifies the cultural forms of the historic context. Therefore, its value is as significant as heritage's historical and traditional values in terms of the movement of cultural continuity.

Sense of Place

Although the contemporary conservation movement has already considered the protection of the historical character of the regional environment for nearly half a century, the concept of sense of place has only been a noticeable issue in conservation practice within the last thirty years. While the conservation movement has adopted the term sense of place, this idea has already been circulating in architecture, geography and urban studies through the influence of phenomenology. These aspects of sense of place will help us to understand this key idea and will be explored subsequently.

Sense of place has been a prominent subject in recent studies of place due to concerns from scholars such as Relph over its disappearance in the universal aspirations and generic placeless effects of modernism (1976: 90; 1997: 215-220). However, there are also some scholars, such as Massey and Lippard, who disagree that the globalization inevitably causes the disappearance of a sense of place, because it also stimulates nationalistic reactions that resist the generic and universal (Massey 1997: 315-323). Furthermore, as long as the effect of everyday culture exists, specific place identities will never be wholly assimilated into a broader outlook favouring a global focus (Lippard 1997: 20). But whether or not this concern over the disappearance of a sense of place is necessary, it has caused the issue of place to be more widely appreciated and debated (Harvey 1996: 297). Significantly for the purposes of this thesis, it has already raised respect for the value of place identity in recent conservation practice.

In terms of the movement of cultural continuity in which the concept of place is respected, the *Declaration of San Antonio* (1996) suggested that the conservation of overall character is often more important than the conservation of the physical built fabric of a given area. Thus, as mentioned earlier, the scope of cultural heritage should involve not only tangible and intangible attributes, but also the sense of place derived from the overall traditional character of a given place. Sense of place is usually referred to as *genius loci* or 'spirit of place', and is derived from the historical and symbolic socio-cultural values of a specific area (Jivén and Larkham 2003: 79). *Genius loci* was defined by Conzen as the 'culture- and history-conditioned character which commonly reflects not only the work and aspirations of the society at present in occupancy but also that of its precursors in the area' (1967: 56-57). This spiritual value of place provides orientation and identification for a given environment (Norberg-Schulz 1980: 18-19). As a result, the sense of place in a particular situation resides in the atmosphere, character, quality and *genius loci* of the environment, and this creates the locality and the

identity of the social context in the place (Jackson 1994: 157-158; Jivén and Larkham 2003: 68-70). Moreover, as Jivén and Larkham suggested, a sense of place provides the profile for testing the authenticity and integrity of the traditional character of a place (2003: 77-78). Therefore, it is significant to persistently maintain the sense of place in conservation practice so as to prolong the life of the overall traditional character of a place.

Yet, a sense of place is derived from not only the traditional values of a place, but also the human experience. According to scholars working on the concept of place, such as Norberg-Schulz, Relph, and the geographer Yi-Fu Tuan, 'place' means a location or space with a specific meaning, and it emphasizes the being and the human experience rather than the 'scientific' concepts of the space (Norberg-Schulz 1980: 8; Relph 1976: 43; Tuan 1977: 17-18). The meaning that makes space a place is derived from the everyday narrative of human re-appropriation (de Certeau 1984: 117-118). When such meanings are gathered in a place, they constitute the *genius loci* of the place (Norberg-Schulz 1980: 170). Thus, in terms of the essence of a given place, location, landscape and community are less influential than human experience, because the former only constitute a space while the latter makes it a place (Relph 1976: 43; Tuan 1977: 17-18). Therefore, human cultural experience is as important as historical tradition in the making of a place.

Most importantly, in the making of this everyday sense of place, today's everyday cultural experience is as significant as the traditional cultural experience, but is seldom considered in conservation practice. As Norberg-Schulz argued, 'man is an integral part of the environment. To belong to a place means to have an existential foothold, in a concrete everyday sense' (1980: 23). That is to say, the story of human experience that creates the everyday sense of place resides not only in the past cultural context, but also in the contemporary everyday cultural process. Thus, a sense of place is inseparable from the contemporary practice of everyday life (Cresswell 2004: 34, 70; Massey 1997: 315-323;

Warren 1996: 38). As a result, as Allan Pred and Massey have suggested, the notion of place is not static – it emphasizes everyday change and process (Massey 1997: 315-323; Pred 1984: 279). Places are constructed by individual stories of present traces and in this sense are never 'finished' but always 'becoming' (Pred 1984: 279; Thrift 2000). Therefore, this everyday sense of place cannot be merely measured since its meaning is essentially inconstant (Warren 1996: 38). In addition, although a sense of place is derived from human everyday cultural appropriation, human everyday behaviours are also influenced by the existing sense of place. A place and its socio-cultural context are thus formed by each other (Malpas 1999: 35-36). As a result, the concept of sense of place involves both traditional values and the contemporary everyday narrative of human experience. In terms of the management of urban change, when we maintain the sense of place derived from the traditional character of a place, we must also consider the protection of the contemporary everyday sense of place.

2.4 LIMITS OF URBAN CONSERVATION

Conservation theory has developed sophisticated ways of understanding and appreciating urban environments. Beginning with an interest in the material artefact, buildings, it has developed more expansive and complex ideas about the integrity of cultural environments. This has involved developing an appreciation for mobile and immobile heritage. Despite this, there are still aspects of the case of Tainan – the focus of this thesis – that are not well served by this understanding of conservation. In particular, the hybrid, fragmented and everyday life aspects of this historic city seem to be out of reach to contemporary conservation theory and practice. So, my aim in subsequent chapters is to develop morphological and everyday life approaches to the city as a means of better understanding the complex fabric of inner-city Tainan.

As I have suggested earlier in this chapter, an understanding of the value of the urban fabric is important for decision making regarding future urban change. Being the oldest city of Taiwan, the urban fabric of central Tainan indeed has significant historic value for conservation. But due to the complicated colonial past, the conservation values reside in the formative and ongoing transformative processes that underpin the city's contemporary sense of place, rather than in the historical building context per se. Therefore, this conservation project requires a study of the history of central Tainan, so as allow us to grasp the value of the urban fabric for future urban change management. To this end, this thesis will engage with the concept of urban morphology. Urban morphology is helpful for the study of urban formation and transformation, and is often used as a tool for urban analysis for conservation. Such a study will help us to understand how the urban fabric contributes to the making of a unique sense of place generally, and in Tainan in particular.

STUDY OF URBAN CHANGES: TYPOMORPHOLOGY

Urban fabric is not similar to a piece of cloth, it is a kind of material with its own properties. The fertile direction for the analogy lies in the recognition that the internal structure of a material has a fundamental bearing on how it behaves under stress or when it is manipulated. Different materials have their own distinct 'handling characteristics'.

(Kropf 2005: 17)

In contemporary urban conservation practice the study of urban form, especially in the context of its cultural landscape, is often the first task which must be carried out. As we have seen in Chapter 2, the purpose of conserving a city is to manage its sense of place. In order to grasp the sense of place derived from its past traditions, we must understand the cultural significance of the urban landscape elements inherited from its history. To this end, it is necessary to explore the process of urban change. Urban morphology is one of the most common urban analytical approaches for conservation practice. It is a theoretical perspective that pays particular attention to the continuous dynamic change of urban form. In this theory, changes which have taken place in the landscape are analysed through systematic mapping techniques so as to provide an appropriate historical grounding for proposals for contemporary urban change management. In terms of the existing literature, an exploration of the concept of change in morphology is important as it is one of the major concerns of this thesis. A review of this material will be helpful in forming the methodology for describing the formative processes at work in the city of Tainan, the empirical focus of this thesis, and site for discussions on everyday life, sense of place and urban change. This chapter will therefore explore the theory and analytical approach of morphology on the dynamics of urban change.

As Anne Vernez Moudon has provided a useful contemporary encapsulation that well defines the morphological approach to the city, it is helpful to explore her words here for a general account of morphology:

Urban morphologists focus on the tangible results of social and economic forces: they study the outcomes of ideas and intentions as they take shape on the ground and mould our cities. Buildings, gardens, streets, parks, and monuments, are among the main elements of morphological analysis. These elements, however, are considered as organisms which are constantly used and hence transformed through time. They also exist in a state of tight dynamic interrelationship: built structures shaping and being shaped by the open spaces around them, public streets serving and being used by private land owners along them.

(Moudon 1997: 3)

In this argument, Moudon focused on ‘tangible results of social and economic forces’, that is, on the material effects or outcomes of ‘idea and intentions’. Also, she insists on the way ideas ‘take shape on the ground and mould our cities’. It is clear that *form* is significant for morphological approaches to the city. Then she offers a range of elements that typically engage morphological analysis. This range involves built form and open space and tends to emphasize urban elements that come into close contact in *urban fabric*. The third element in her definition of morphology is the sense that built form is organic and that it transforms through time. The *reading of change and transformation* is a fundamental characteristic of morphological studies. Finally, she draws our attention to the way in which various urban elements ‘exist in a state of tight dynamic interrelationship’. The city is viewed as consisting of material forms that change and are interrelated over time. Morphology is hence understood to be concerned with the dynamics of city formation and transformation.

Similar arguments on the definition and scope of urban morphology can also be found in Larkham

(1996: 27-28; 2002: 95), Larkham and Jones (1991), Whitehand and Larkham (1992), Whitehand (1987) and many other contemporary urban morphologists. Among their discussions, the key points of definition are summarized by Larkham as that the morphological approach is thus founded on three dimensions of urban context, namely form, function and development (history), to map the changes (2002: 95-97). In addition, although, as noted earlier, the study of urban morphology is often regarded as a tool for preparing urban conservation practice, the significance of understanding the morphological process of a city is not limited by the purpose of conservation, but forms a fundamental background and framework for urbanism more generally (Kropf 2005: 17; 2006: 73). It is suggested that an integrated morphological study should aim to contribute strategies for both urban landscape management and urban design (Whitehand 2006: 87-88). To this end, because morphology takes in issues of history, geography, architecture and sociology, it is necessarily an interdisciplinary approach to urban analysis.

Since the concept of typology is often considered as a parallel idea to urban morphology, the term typomorphology is frequently used to capture and activate both concepts. The International Seminar on Urban Form (ISUF)¹ has proposed that there are three major schools on typomorphology: the British geography-based Conzenian School; the Italian architecture-based Muratorian School; and the French Versailles School (Moudon 1997: 4; Heineberg 2007: 7). The concept of urban morphology is often linked to the Conzenian School, while the Italian School usually relies on the concept of typology. These two schools have formed a solid foundation for typomorphological studies of the built landscape. By contrast, the French School places greater emphasis on the everyday practical relationship between built space and social space. The Conzenian School is concerned with the historico-geographical issues of how today's cities were formed and why; the Italian School

¹ ISUF is an international organization for the studies of urban morphology and typology; inaugurated in 1994, it is also the publisher of the journal *Urban Morphology*.

concentrates on the design issues of how cities should be built according to their traditional logics of urban changes; and the Versailles School, incorporating literature and social science perspectives, focuses on design criticism (Moudon 1994: 290; 1997: 8). Although these schools are grounded in different disciplines – geography, architecture and sociology respectively – they share a common attitude to the study of urban form. Their similarities and differences in theory and analytical approach will be explored further in the following sections.

3.1 CONZENIAN SCHOOL

M.R.G. Conzen (1907-2000), studied geography in Germany in the 1930s, conducted postgraduate research in Manchester and then taught in Newcastle, where he began to develop his theory of urban morphology. He argued that the city is like a ‘palimpsest’ constituted through a process of historic socio-cultural stratification in which some parts of the older urban fabric were replaced with newer parts while others were maintained. The resultant urban form is therefore the representation of the synthesis of the socio-cultural contexts in each historical period. That is to say, the urban landscape is, in his words, ‘a mirror of the functioning life of urban society’ over time, as it reflects the shifting nature of human needs (Conzen 2004: 49-51). Following such an idea, morphological analysis aims to unpack this urban stratification to enable an understanding of how ‘town plans originate, develop, and function within a physical and human context’ (Conzen 1969: 5). This approach focuses on ‘the identification of formative processes and their geographical results in the townscape’ (Conzen 2004: 30). Accordingly, a morphological analysis is not only interested in the transformations of physical landscape, but also concerned with the changes of functional attributes that reflect the transitions of the socio-cultural context residing in the transforming physical context. In this case, there are three significant dimensions of the urban context which must be considered: the *functional* (socio-cultural

context), the *morphological* (physical form), and the *historico-geographical* (time) attributes (Conzen 2004: 48; Larkham 2002: 95-97; Moudon 1997: 7). Based on this theory, Conzen developed a systematic approach for analysing the urban palimpsest so as to understand its formative process. In practical terms, as he emphasized, in order to enable us to grasp the morphological character of a city, a morphological approach must involve three types of historico-geographically informed townscape analysis, namely town-plan, building fabric and land utilization analyses (Conzen 2004: 53).

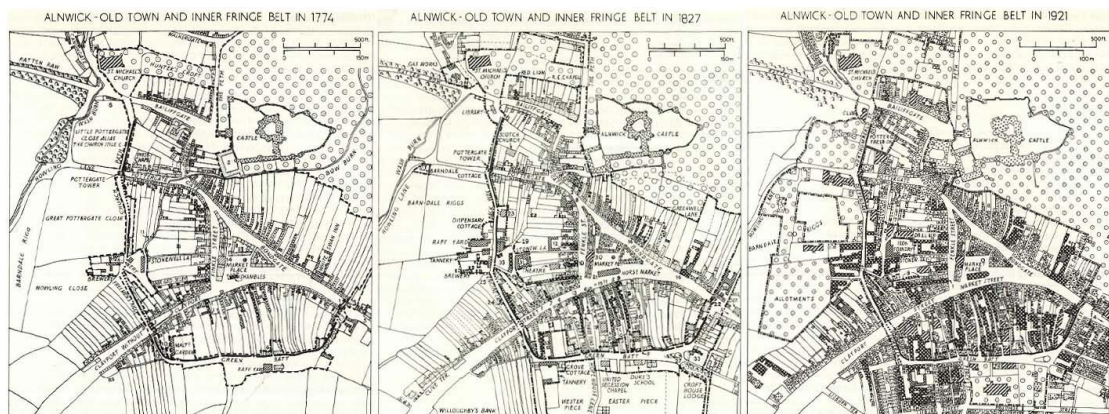


Figure 3.1 Alnwick Old Town in 1774 (left), 1827 (centre), and 1921 (right) (Conzen 1969: 57, 60, 79)

Analytical Approach

In Conzen's theory, a town plan is composed of the three basic elements of street system, plot pattern and building coverage. The process of change in these three elements is the central concern of morphological study (2004: 54). This taxonomic methodology has formed the framework of Conzenian typomorphological analysis (Moudon 1994: 297). Then a mapping approach is necessary in order to explore the morphological process of a city, based on comparison between the changes to the city fabric over time. Here, we shall illustrate the approach further through Conzen's morphological analysis of the Northumbrian town of Alnwick, perhaps the most well-known of his studies. The process of change to the three basic urban elements in Alnwick can be seen in the town

plan maps in Figure 3.1. As these maps represent not only the street system, plot pattern and building coverage, but also the condition of residential-commercial complexes in each period, we can learn through them the changes over time in commercial capacity, building density, and residential proportion. Thus, they have provided the foundation for the morphological analysis of Alnwick (Conzen 1969: 49-88).

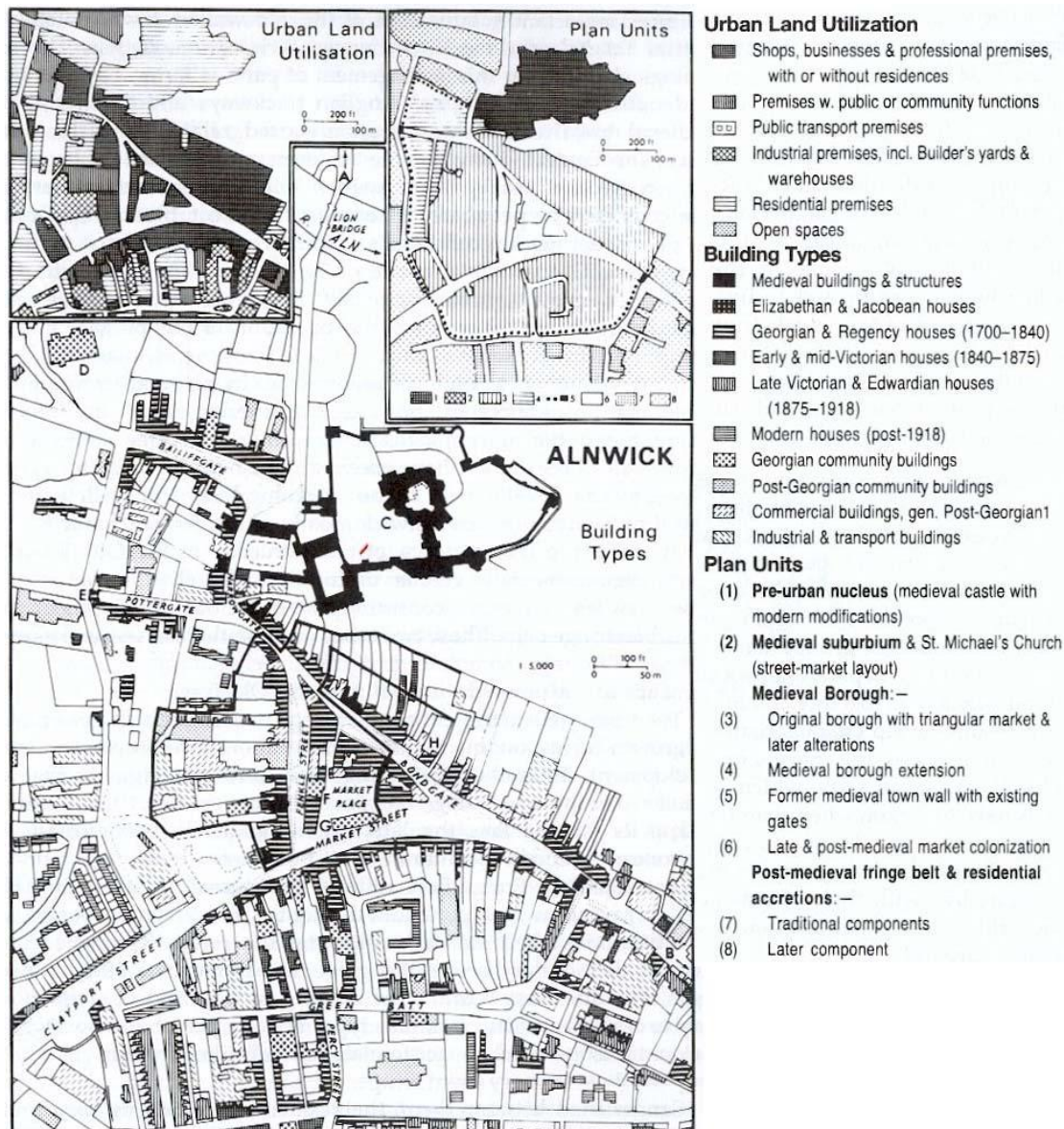


Figure 3.2 Alnwick: plan unit, building type, and land utilization (Conzen 2004: 102-103)

Plan unit

Based on a set of maps and diagrams (Figure 3.1), Conzen conducted a series of morphological analyses of Alnwick focussing on its town plan, building type and land utilization (Figure 3.2). In the town plan analysis, Conzen identified a number of what he called 'plan units'. A plan unit is an area with similar morphotopes, that is: 'the smallest urban localities obtaining distinctive character among their neighbours from their particular combination of constituent morphological elements' (Conzen 1988: 259). In other words, a morphotope is the smallest region type, composed of a group of buildings in which its overall fabric character is distinct from others. A plan unit is, furthermore, often a larger-scale area involving several similar morphotopes with combinations of streets, plots and buildings (Conzen 1969: 5; 2004: 57, 73). The Old Town of an historic city can be a good example of a plan unit as its historic regional character, usually medieval, often defines its distinguishable territory, within which the morphotopes are the building groups with significant shared formal and material characteristics. For Conzen the plan unit is important because they help us read the formative processes of a city. As can be seen in Figure 3.2, the plan unit diagram illustrates the process of accretion emerging over time, whereby newer plan units come to be assembled around older ones. Since they were involved in the formative process synchronically, each unit is distinguishable from the adjoining units because of its identifiable regional cultural characteristics of different historical periods. (Conzen 2004: 54-58). This technique is often considered as the core of the Conzenian morphological approach.

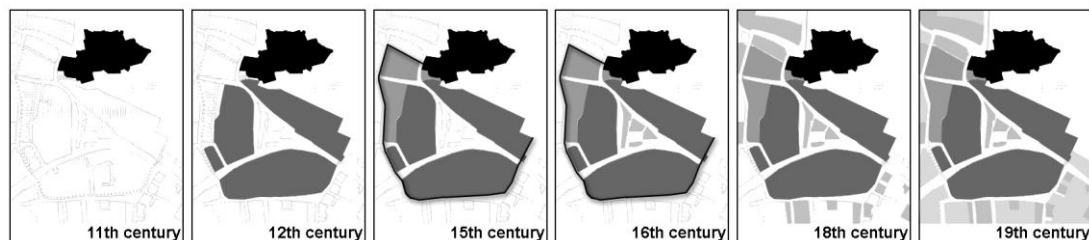


Figure 3.3 Formative process of Alnwick town centre (adapted from the plan unit diagram in Figure 3.2)

Figure 3.3 (p.47) is my reinterpretation of the concept of plan units described in Figure 3.2. It shows the sequence of plan units in Alnwick, the oldest development being the castle, with the triangular market area and its surrounding burgage series following. All of these developments were then surrounded in the late medieval period by town walls. From the 18th century, the town development eventually expanded beyond these medieval walls. The diagrams (Figures 3.2 and 3.3) not only show the formative process of Alnwick, but also provide a foundation for further discussions on the morphological characteristics of different periods. For instance, the burgage series which developed in the 12th century around the triangular market area, as shown in the building types diagram in Figure 3.2, features a range of traditional medieval long strip-plots with main houses occupying the burgage heads facing onto the central market area. This fabric can no longer be seen in the follow-up developments outside the town wall and thus has been viewed as a significant medieval morphological character.

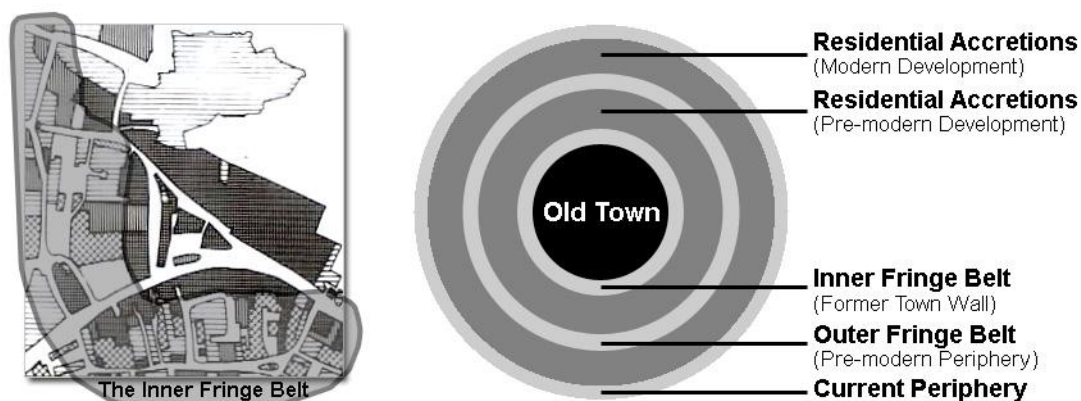


Figure 3.4a (left) Inner fringe belt in Alnwick (edited from Figure 3.2); 3.4b (right) Fringe belt concept

Fringe belt and burgage cycle

Conzen built on this detailed historical analysis of Alnwick by proposing some general morphological concepts, in particular, the ‘fringe belt’ and ‘burgage cycle’, which can be commonly found in many medieval towns in Europe. The movement of town expansion can slow down or stop due to natural

obstacles or economic factors; when it develops outward again after such a situation, a distinct boundary belt area, the fringe belt, appears between the new spread and the previous expanded areas as a result of the notable difference between two areas in landscape terms (Conzen 2004: 104; Larkham 1998: 163; Whitehand 2001: 105-106). As Figure 3.4 illustrates, such annular ring-like areas can often be found in the belt area along both sides (intramural and extramural) of the fixation line of the former medieval town wall, or the boundary area between terraced houses and inter-war semi-detached houses in British towns (Conzen 2004: 104; Whitehand 2001: 106). Fringe belt areas usually comprise various kinds of land use, such as industries, institutions, community services and open spaces (Kristjánssdóttir 2001). As can be seen in Figure 3.4a, a mixed-use fringe belt area can be identified along the line of the former town wall. This is because the wall was once marked the peripheral boundary of the town during the medieval period (Figure 3.3, p.47), and the developments that required larger lots and did not need to be located in the central area, such as factories, thus emerged in this outer area. As illustrated in Figures 3.4b and 3.5, after developing outwards, new residential accretions developed outside the former peripheral area. Thus, the former peripheral area, the fringe belt between new and old residential areas, can be identified as the boundary between residential developments of different periods (Conzen 1969: 56; Whitehand 2001: 105-106).

With respect to burgrave cycle, this refers to the cyclic process of building coverage development in British towns (Figure 3.6). Usually, the main buildings are constructed along the main streets in the initial development, and then more and more buildings are not only added in the rear of the plots, but also developed vertically; but when the process reaches a maximum sustainable coverage or density, the buildings are eliminated to make way for redevelopments (Conzen 1969: 67-69; 2004: 110; Larkham 1996: 175; 1998: 168; Heineberg 2007: 7). Such redevelopments particularly refer to the activities of reorganizing the existing plots for modern urbanism in the early 20th century.

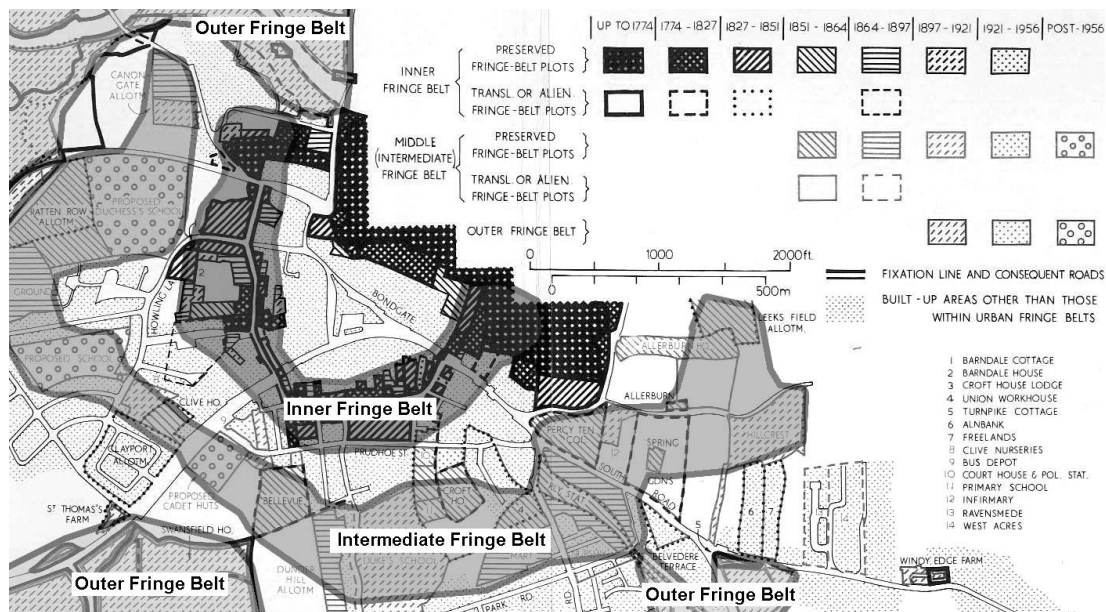


Figure 3.5 Fringe belts in Alnwick (adapted from Conzen, 1969)

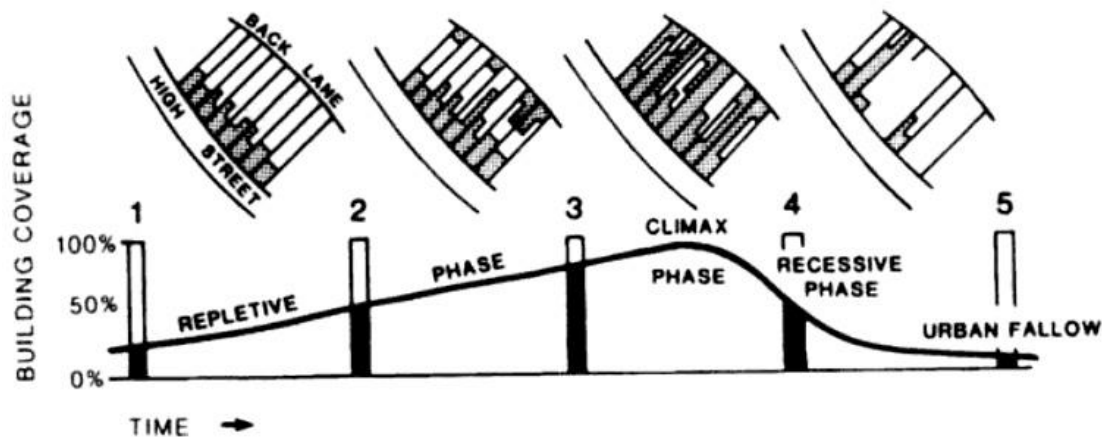


Figure 3.6 Phases in the burgage cycle (Larkham 1996: 175)

The phenomenon of the burgage cycle in Alnwick can be found in the maps shown in Figure 3.7. As these show, the climax of building coverage development in that town was in the early 20th century. Then, as the 1964 map shows (circled), the subsequent reorganizations can be seen in street block A for transport purposes, and in the centre of block B for modern residential redevelopments.

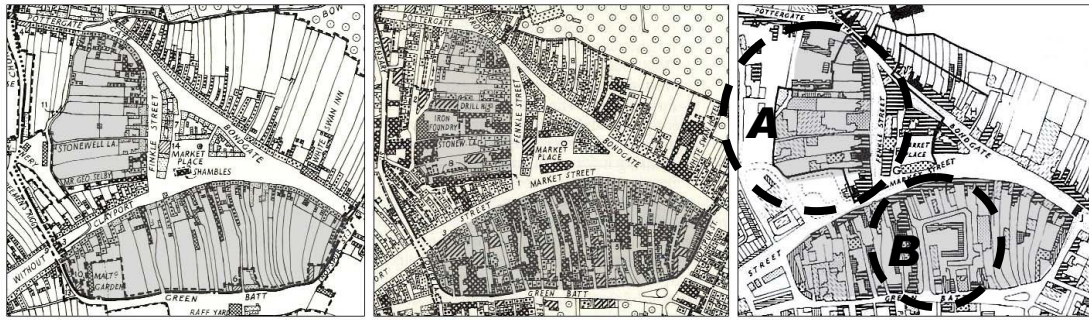


Figure 3.7 Alnwick: building coverage in 1774 (left), 1921 (centre), and 1964 (right) (the 1774 and 1921 maps are edited from Figure 3.1; the 1964 map is edited from Figure 3.2)

Building character

A second means of reading urban growth and change that Conzen proposed related to what he called 'building character'. In Figure 3.2 (p.46), residential buildings (including residential-commercial complex buildings) are classified into several types by their period characters, such as Medieval, Georgian and Victorian houses. Non-residential buildings, including warehouses, transport buildings and industrial buildings, appear less significant in their period character and thus are not considered in the classification system (Conzen 2004: 105). A building-type diagram can help us to consider urban design or town plan management strategies. Generally speaking, the older parts in a town are often more heterogeneous in terms of building types due to their complicated stratifications, while the newer parts are more homogeneous. But, as can be seen in Figure 3.8, the area of central Alnwick is occupied mainly by Georgian and Regency houses. This highly homogeneous townscape constitutes its regional historical character, and that suggests the conditions of urban design and the identifiable and distinctive value for urban conservation.

Conzen analysed a number of cities and towns in addition to Alnwick using this methodology, the best known of which were his studies of Newcastle and Ludlow (2004: 108-142). Analyses of these cities provided not only suggestions on the management of urban landscape, but also foundations for comparative studies (Conzen 2004: 114, 137). Comparative study is important as it can extract

similarities in formative process between towns so as to permit informed extrapolation about their morphological characteristics (Larkham 2006: 120).

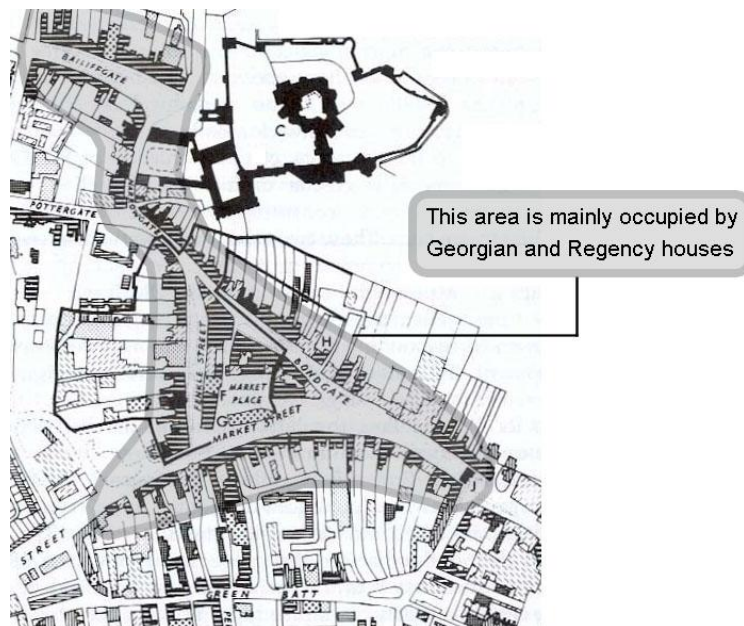


Figure 3.8 Homogeneous historic townscape in the central Alnwick (edited from Figure 3.2)

Subsequent Researches on Management Approach

The urban geographer J.W.R. Whitehand, following Conzen's earlier work, founded the Urban Morphology Research Group at the University of Birmingham in 1974. Since then, the Conzenian School also came to be referred to as the Birmingham School. Of scholars in this research group, the work of Whitehand and Larkham was important for their emphases of the relationship between urban change and corresponding management policy proposals. As this is one of the major concerns of this thesis, I will examine their work below.

Following Conzen's approach, the concerns of Whitehand and Larkham have changed a bit and that they are trying to respond to contemporary urban design issues. Let us move back to Conzen for a

while, as he argued that today's landscape and life style in a city are deeply influenced by its historical traditions, but that contemporary planning approaches often ignore the significance of such influences and arbitrarily imitate planning modes from other countries. For example, the American idea of CBD can be easily found in many Asian cities. However, because of their literal differences in cultural and economic background, their application can only cause conflicts in urban developments (Conzen 2004: 30-31). The urban form is like a palimpsest and its unique social background and human cultural experience, as mentioned in Chapter 2, can constitute its locality, identity, sense of place and *genius loci*. Therefore, a proper comprehension of the formative process and the socio-cultural settings of the city through morphological studies will help with the landscape management of a city by enabling a grasp of its cultural character (Conzen 2004: 38-41, 58). Following this concept, Whitehand and Larkham suggested further explorations of the possibilities of managing this cultural character by urban design practice (Larkham 2006: 117; Whitehand and Larkham 1992: 7).

Furthermore, as Whitehand and Larkham indicated, the Conzenian morphological theory has supported the following research orientations on urban changes: the historical transitional process of urban landscape, agents in urban landscape change, architecture and style, urban conservation, and urban landscape management (Larkham 2006: 120-125; Whitehand and Larkham 1992: 7). Usually, the agents of change include direct agents such as landowners and architects, and indirect agents such as local planning authorities and interested third parties (Larkham 1996: 134-136; 2006: 121-122). Direct agents can make spontaneous changes which have a direct causal relationship with cultural effects, while indirect agents often operate intervening and subjective changes. Although the indirect agents always have more significant influences on urban changes, they both need to be considered in the policy-making process. In addition, the morphological study of architecture and style must refer to the cultural phenomenon of formative changes rather than the art styles (Larkham 2006: 122). Understanding these socio-cultural backgrounds of changes will help decision making in urban design

practice and management of a sense of place (Larkham 1998: 171-172; 2006: 121-122; Whitehand and Larkham 1992: 7-8). Therefore, in respect of the later case studies in this thesis, the Conzenian School will offer a set of methodological approaches to the process of urban changes in Tainan. These approaches will enable discussion on the urban sense of place and interactions between places and their local everyday narratives. Furthermore, this approach will inform an outline for an appropriate urban design approach for the management of this sense of place.

3.2 MURATORIAN SCHOOL

The architect Saverio Muratori (1910-1973) was motivated by what he considered to be the incoherence of the modernist architectural form in the historical urban landscape, and thus argued that we must re-examine successive architectural formative changes in the past in order to identify the root of contemporary architectural form (Corsini 1997: 34; Marzot 2002: 63; Moudon 1994: 290).² In his view, ‘the city is a living organism in a state of perpetual transformation, which contained within itself the capacity for change’ (Menghini 2002: 81). Contemporary design must identify the dynamic of this transformation and understand how to engage with it appropriately. In the 1950s, Muratori taught in Venice and Rome and introduced the concept of ‘operative history’ (Cataldi 1998: 4; Moudon 1997: 4). In his theory, ‘history should be neither descriptive nor abstract, but operational and concrete’ (Petrucchioli 1998a: 60). In this sense, history is considered as determined action, like a project operating under specific concrete rules. This theory thus indicates some rules residing in the process of urban changes. The process is again likened to a palimpsest in which the older developments condition the later so that diverse developments are continually produced under conditions that

² Muratori’s studies were mainly theoretical in character, and he did not produce a large published output (and most of those are unavailable in English). Most of his ideas were reinterpreted and published posthumously by his assistants or students, especially in the work of Caniggia and Maffei.

acknowledge the accreted materiality of the city. Accordingly, although contemporary design practice can still be performed freely, it is conditioned by the historical evolutionary logic of urban change. Muratori argued that such conditions of design can help solve the problems caused by modernist architectural development (Marzot 2002: 63; Petruccioli 1998a: 60).

As Muratori focused on the evolutionary process of urban change, he classified the elements of built landscape into 'types' so as to allow analysis of their 'typological processes' (Moudon 1994: 290-291). In the Muratorian concept of typology,³ a city is composed of elements with certain aggregating logic, and each element also contains certain forming logics of its own. An element thus functions as both 'matrix' and 'module' in urban development. A matrix is composed of some modules, while the matrix itself is one of the modules for a larger matrix. Type is then the concept of such a system of combination between modules or within a matrix, and a unique typology can thus be identified through its specific combination logic. Following this analysis, a typological process is the transitional process in the system of urban combination that is driven by the changes demanded by social needs. Since the city is viewed as a living organism, 'type is the generating principle of a process, a "forming form" which changes while remaining itself' (Menghini 2002: 81). This process needs to be discussed through some phases and, in each phase, a 'leading type' can always be generalized as the major reference of the phase. The conditions and principles in the forming logic of a specific type can therefore be learnt through reading its traditional typological process so as to determine its methodology for contemporary design (Cataldi 1998: 37; Petruccioli 1998a: 62).

In Muratori's theory, the typological process is founded on 'spontaneous consciousness'. Usually, the

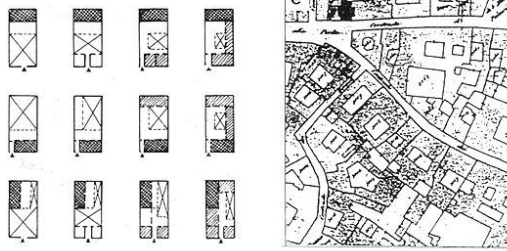
³ Typology is a very broad concept; here we only explore the Muratorian concept. Generally speaking, French theorists A.C. Quatremère de Quincy and J.N.L. Durand were the first to apply typological study to architectural design. In Quatremère's essay (1998 [1825]), types were defined as rules to be followed. Although Muratori never mentioned Quatremère in his works, Quatremère's concept of type had influenced Rossi and many others and is often considered as the mainstream of typological studies.

existing type provides itself as the *a priori* type. That is to say, the continuity of typological development is not created purposely, but developed naturally, while the architects are influenced by the concept of type, as a result of cultural effect (Caniggia and Maffei 2001: 43-45; Cataldi 1998: 36-37; Petruccioli 1998a: 62). However, since our spontaneous consciousness has faded away due to the modernist intervention, we must reconstruct it by the means of *a posteriori* action. The study of typological process helps enable contemporary development to reconnect with the cultural traditions embedded in the urban fabric (Caniggia and Maffei 2001: 45-47; Petruccioli 1998a: 62).

Analytical Approach

Since the major concern of this thesis is the issue of urban change, I shall only illustrate the concept of typological evolution in architectural form concisely through Figure 3.9 (p.57), a page of diagrams adapted from the work of Maria Grazia Corsini (1997). This figure shows the leading types of apartment building representing different historical phases in Milan and Rome. As can be seen, in the early 20th century, the principal type of apartment floor plan in Milan has horizontal circulation connecting the flat units, while in Rome the units are isolated, with exclusive vertical circulations. Such differences in combination logic of matrix and module reflect the evolutionary processes of multi-family residential building forms since the medieval period. As Corsini suggested, contemporary design must grasp such *rules* evolved from the past traditions of a city so as to allow the continuity of local typological process (1997: 48).

Milan



Buildings were developed along the edge of a plot and formed the courtyard house fabric.

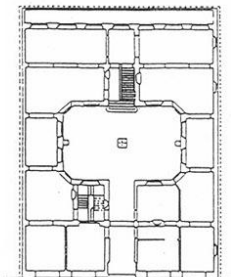
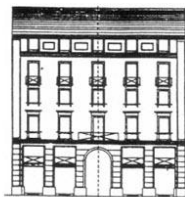
Medieval residential building



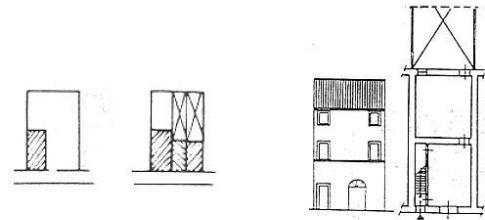
Two adjoining courtyard houses became one larger courtyard building.

Multi-family residential building in early 19th century

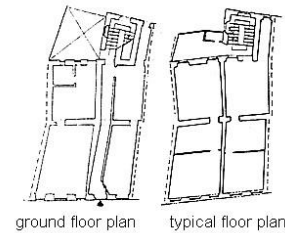
The courtyard house as a complete whole.



Rome

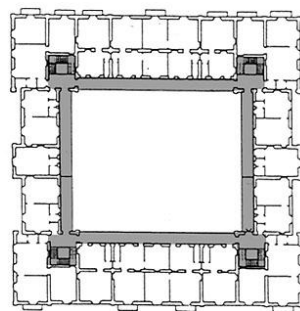


Typical row house fabric, with a yard in the rear of each house.



Two adjoining row houses become one multi-family building, with an additional staircase for both houses.

Planned apartment building in late 19th century



Planned apartment building in early 20th century

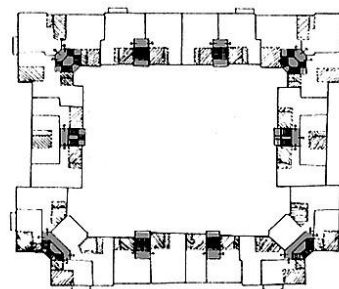


Figure 3.9 Typological processes of apartment buildings in Milan and Rome (author's interpretation; diagrams adapted from Corsini, 1997)

Gianfranco Caniggia (1932-1987), one of Muratori's assistants and the principal protagonist of the Muratorian tradition of typology, continued to promote his theory beyond the Italian-speaking world and carried out a series of practical analyses of typological processes between the 1960s and the 1980s. This included the publication, in 1963 and supervised by Muratori, the operative history of the city of Como. Thus, the Italian School has become more highly developed in the practice of its analytical approaches and in the state of its international impact (Caniggia and Maffei 2001: 13; Moudon 1994: 291; 1997: 4). We shall therefore explore the concept of urban change in typological process through Caniggia's work.

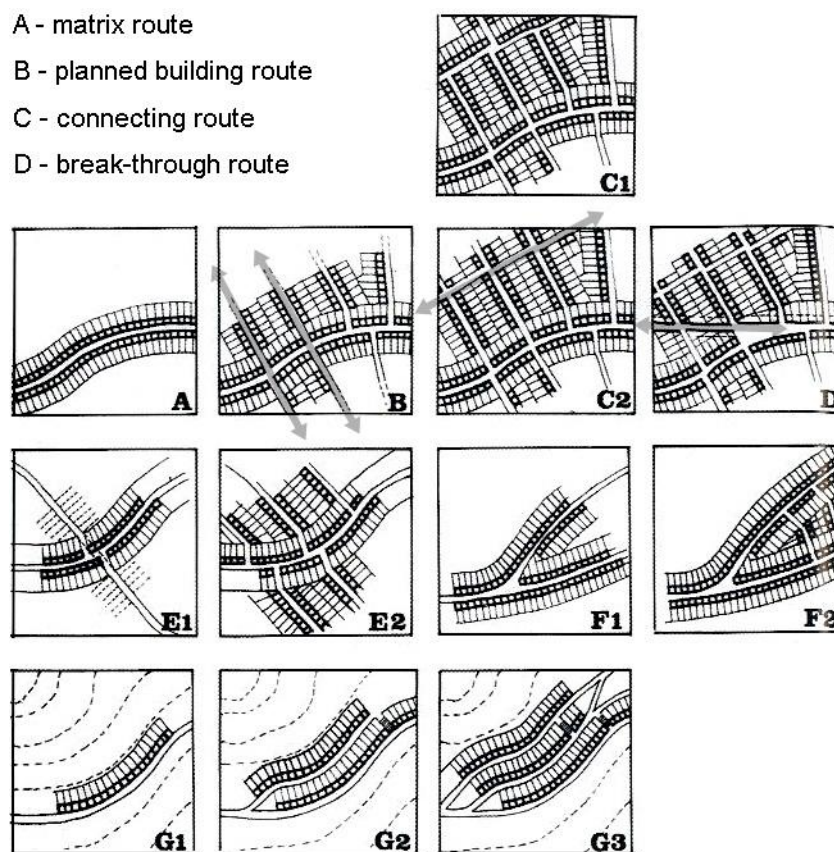


Figure 3.10 Urban tissue formative process (adapted from Caniggia and Maffei, 2001)

Tissue and routes

In order to analyse the typological process of a city, Caniggia introduced the concept of urban tissue.

The concept of 'tissue', akin to 'type', is based on the spontaneous consciousness resulting from human cultural experience, and it emphasizes the formative process of the coexistence of several buildings (Caniggia and Maffei 2001: 118-119). In principle, the analysis of urban tissue explores the structural development of 'routes'. The growth of building aggregates always expands along existing routes; in this case, a route is a matrix of building lot modules, while several interrelated routes structure the matrix of tissue. In Figure 3.10, diagram A shows a 'matrix route', which refers to the spread of buildings along an existing route. A number of 'planned building routes' are described in diagram B, reaching along a perpendicular axis and destroying some existing buildings on the first matrix route. Diagram C, describes a 'connecting route' establishing the connection between existing routes. It is noticeable that the front orientation of building lots follows the hierarchy of routes. For example, the connecting route in C1 appears to be more appreciated than the one in C2. Then diagram D shows a 'break-through route' developed for peculiar needs by cutting across existing blocks. Following the hierarchical and sequential logic of these diagrams, the further set of diagrams E, F and G illustrate different types of tissue in which various combination modes between planned routes and matrix routes can be found (Caniggia and Maffei 2001: 127-135).



Figure 3.11 Urban tissue formative process of the San Frediano quarter in Florence (author's interpretation; maps adapted from Caniggia and Maffei, 2001)

Figure 3.11 shows the formative process of a piece of urban tissue in Florence. The process is divided into three stages. All the building lots were developed along two matrix routes in the first stage. Then

some planned routes appeared, in particular, the two bridges, perpendicular to the existing matrix routes. Finally, some connecting routes were established to connect the existing routes scattered in the first and later developed areas, with one break-through route destroying some blocks to form axes.

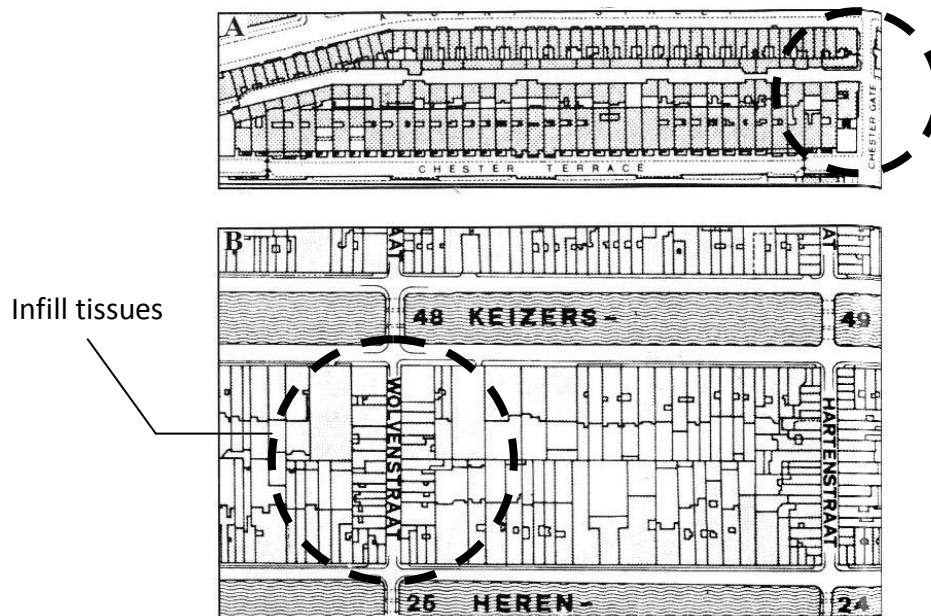


Figure 3.12 Urban fabrics in London (A) and Amsterdam (B) (adapted from Caniggia and Maffei, 2001)

Tissue and locality

This analytical approach allows an understanding of the character of the fabric formative process in a tissue so as to enable us to grasp the framework of urban structure, such as the axes, the process of making blocks, and the identification of first and later developed areas. It aims to identify the *local* logics in the process of urban changes. These reside not only in the combination system of routes but also in the settling manner of building lots. For instance, as Figure 3.12 shows, in Amsterdam, infill tissue can be found in block edges for correcting the orientation of building lots to face new planned routes, while such an infill strategy is not employed in London. That indicates the differences between the local logics of spontaneous response to the planned routes in the two cities.

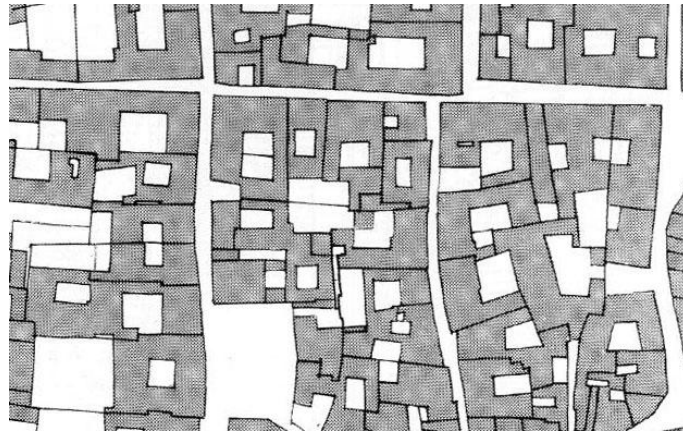


Figure 3.13 Courtyard house fabric in the city of Como (Caniggia and Maffei 2001: 80)

However, the in-fill building lots for a matrix route are not always row houses. As can be seen in Figures 3.9 (p.57) and 3.13, the urban tissue in Milan and Como are, respectively, composed of courtyard houses. In this case, there are no planned routes in the tissue, although connecting routes can still be found at certain intervals linking the matrix routes. In this kind of tissue, the dilemma of building-front orientation does not exist. It should therefore be treated as a unique type of spontaneous tissue (Caniggia and Maffei 2001: 143).

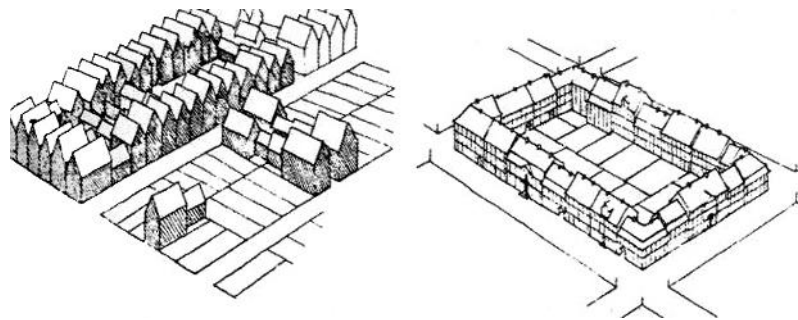


Figure 3.14 Medieval block (*left*) and Baroque block (*right*) (Caniggia and Maffei 2001: 145)

In addition, the street blocks formed by different logics of route combination systems have different tissue characters. For example, in Figure 3.14, the left-hand diagram shows the classic medieval blocks that are formed by the theory described above, but the Baroque block in the right-hand diagram shows a great unity in the building fronts with special attention paid to the corner design. Therefore,

urban tissue represents the unique formative background of a city, and it thus helps to form the local cultural character. Contemporary urban design and planning, according to this analysis, must enable the continuity of these local logics of growth in each matrix and module, so as to avoid the rupture and potential placelessness of modernist approaches.

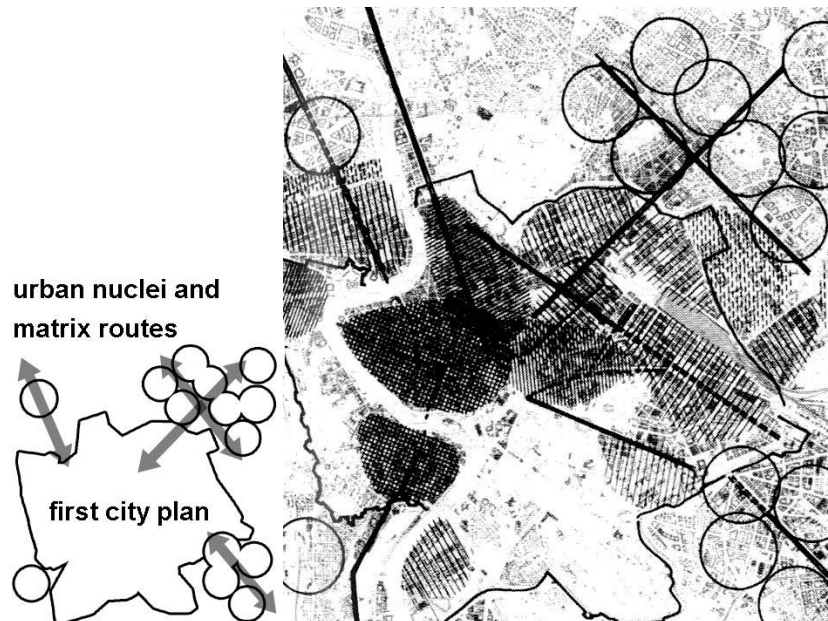


Figure 3.15 Urban nucleus modular expansions in Rome (adapted from Caniggia and Maffei, 2001)

Tissue and the city

Caniggia and Maffei build on these observations to engage with the development of large cities. They argued that when urban tissue grows into a self-contained centre, it functions not only as a matrix, but also as a module of a metropolis. As the example of Rome illustrated in Figure 3.15 shows, such tissue modules can be viewed as the nuclei of an urban organism. Apart from the older part of the city where its medieval town centre still survives, each nucleus has its own centre (2001: 165-166). As Figure 3.15 illustrates, such nucleus modules are developed along some matrix routes, which are not real streets but axial trajectories for spreading. Thus, in Caniggia's concept, contemporary urban sprawl does not grow outward concentrically, but heterogeneously along matrix routes. This concept, with its

emphasis on the shifting of elements and their logic of combination, suggests an approach that can supplement the Conzenian methodology, and will inform the morphological case studies that I will discuss later in this thesis.

Conceptual Comparison

Caniggia's concept is often compared with the Conzenian theory of urban morphology after the two notions were brought together by the ISUF (International Seminar on Urban Form). It is noticeable that both of them have considered the city as a palimpsest, and that both have attempted to conceptualize, diagrammatically represent and analyse such phenomena. They have both argued that the later urban development should always be influenced by the former. Furthermore, they share similar concerns in emphasizing the changes in ordinary urban fabric that reflect socio-cultural transitions, rather than the history of certain types of space and 'high architectures' that are more typically stressed in architectural history (Whitehand 2002: 57-58; 2003: 69-72). However, Conzen focused on how today's cities and towns were formed, whereas Caniggia was interested in how to make the city (Moudon 1997: 8; Whitehand 2002: 57-58; 2003: 69-72). Moreover, Conzen highlighted the changes in regional accretions such as plan units and fringe belts, while Caniggia accentuated the changes in combination systems between urban elements (Marzot 1998: 54-55; Whitehand 2003: 69-72). This difference is clearly illustrated in Figure 3.11 (p.59). As can be seen, the new developed areas in the tissue are highlighted and Conzen might be interested in distinguishing the period characters of these areas from the old fabrics, rather than the arrows (routes) that suggest future development. Furthermore, Karl Kropf (2001) has elaborated more literal differences between their approaches. He suggests that Conzen was concerned with the 'ontogenetic change' of a city. An ontogenetically-driven transitional process is like an individual body; a man grows from young to old and this growth should be understood as 'development' rather than 'evolution' – we do not say we

evolved from a baby. The term ‘evolution’ etymologically refers to the changes between species, for instance humans evolved from apes. It refers to the process of ‘phylogenetic change’, such as changes between versions of products, e.g. the evolution of cars. While these changes are conditioned by certain (typological) rules so that you can always distinguish the new evolution versions between, say, Ford and Volkswagen. Thus, evolution only occurs between versions of a specific type, and not within one single body. According to this view, a city develops but does not evolve, whereas the design concept of an apartment evolves. This idea usefully helps to explain the difference between morphological and typological processes.

Due to its emphasis on the cultural continuity of urban structuring principles, the Muratorian typological study, like the Conzenian morphological study, has often been considered in the decision-making process of urban conservation or architectural restoration works (Petrucchioli 1998a: 67-70). However, there have been some disagreements over the Muratorian approaches. As Attilio Petruccioli noted, in a city with less visible pre-modern fabric, the modernist urban spaces have often already formed the leading types of the modern period, and they have even involved as part of collective memory. It appears that if contemporary design is purposely founded on the pre-modern development, conflicts will happen again. Petruccioli further questioned whether the Muratorian approach can serve today’s social needs (1998a: 70). The Italian architect Carlo Aymonino was also opposed to such evolutionary theory, as he considered that the conditions derived from traditional types would reduce the opportunity for conversation between architecture and contemporary society (Marzot 2002: 69; Moudon 1994: 294). Another Italian architect, Aldo Rossi, also disagreed with the concept of typological process (Marzot 2002: 68). Although he is sometimes treated as representing a branch of the Italian School of typological study, Rossi has never expressed any influence by

Muratori⁴ (Moudon 1994: 293-294; 1997: 5). Like Muratori, Rossi was aware of the environmental impacts caused by the modernist arbitrary approaches, and thus he also suggested programmatic methodologies of design. He also emphasized the concept of type and continuity, but he disagreed with the evolutionary influences. According to his theory, we should search through the history of a place for the rule of a type which is *constant*, and that implies the structuring principles of the type (Rossi 1982: 40-41). Once contemporary design has reflected the rule of the type, it arouses a sense of collective or public memory of that type, and helps sustain a sense of continuity. As far as Rossi was concerned, the concept of city is not the combination of physical structure and fabric, but the product of collective memory (Menghini 2002: 83). Each memory is a narrative of cultural experience in a spatial context. If these memories are irrelevant to each other, the city is then the aggregation of these fragments (Rossi 1982: 130-131). As Grahame Shane has remarked, Rossi's concept of city can be simply viewed as an assemblage of memories that reflects no dominant logic of combination (2005: 141). Accordingly, in his view, contemporary design must reflect both the value of type and the collective memory of spatial experience.

Akin to Rossi, Kropf suggested that contemporary development should be based on not only the analogical concept of type, but also today's social demands. The typological evolutionary process seems not to be that important as it cannot provide any suggestion of the logic of contemporary social contextual changes. Thus, apart from grasping the concept of type from the history, we should explore the interaction between local everyday life and the spatial context of the type empirically, so as to provide proper suggestions for contemporary design and planning (2001: 40). This idea has in fact already been taken into account by the Versailles School, to which I will now turn.

⁴ Rossi's concept of type was inspired by Quatremère de Quincy. Yet there are similarities which can be found between the ideas of Rossi and Muratori, so they are both considered to be branches of the Italian typological conceptual network.

3.3 VERSAILLES SCHOOL

The School of Architecture in Versailles was founded by the architects Philippe Panerai and Jean Castex, together with sociologist Jean Charles Depaule, in the late 1960s. Compared with the other two typomorphological schools, the Versailles School was developed relatively late, and was substantially influenced by the Italian typological concept. Following the Muratorian philosophy, this school was also aware of the incoherent modernist movement in the successive urban formative and transformative processes and was also interested in the forming process of urban tissue. But in terms of morphological approaches, the ideas of the Versailles School are distinguishable from the concepts of the other two schools in several ways. First, they take into account the perspectives not only of architecture, history and geography, but also of sociology; thus, they are concerned with not only the issues of geographical character transitions and contemporary design orientations, but also the relationship between the urban transformative process and social experience (Darin 1998: 66; Moudon 1994: 301; Petruccioli 1998b: 13). Second, influenced by Aymonino and Rossi, they consider that urban analyses only have little influence on design process, so they do not suggest that the productive approach to contemporary urban form must be founded on the traditional logic of typological process. Instead, the aim of urban analysis is to grasp the socio-cultural character of urban life so as to develop proper urban design strategies to manage that character. Furthermore, unlike the Italian School, they do not view modernist development as a disruption to the process of urban changes, but consider it to be a phase of the process (Petruccioli 1998b: 13).

The Versailles School's sociological approach to urban form was mainly inspired by the urban sociologists Henri Lefebvre and Henri Raymond. Influenced by Lefebvre's concept, in particular, of the relationship between spatial productive process and the social experience of human appropriation stressed in his book *The Urban Revolution* (2003 [1970]), Panerai, Castex and Depaule argued that

praxis (social practice) must be taken into account when exploring the issue of urban changes. As they described it:

We could call the practice of space ‘the space of practice’ or, alternatively, ‘how space is used in practice’. It is the spatial dimension of social practice that Lefebvre describes as the ‘gestures, journeys, body and memory, symbol and meaning’. It is a practice that manifests itself through phenomena of appropriation in specific situations, where the configuration of space is significant. These can also be described as spatial-symbolic systems and are underpinned by habits or groupings of customs that are typical of some forms of sociability.

(Panerai *et al.* 2004: 124)

They were concerned with ‘the spatial dimension of social practice’ that emphasizes the human practical experience of using a given space, and the symbol and meaning of such appropriation. In Lefebvre’s concept, the human appropriation is ‘the ultimate goal of social life’ (Moudon 1994: 301). Following Lefebvre’s idea, the Versailles concept of morphology focuses on the interaction between human experience and urban elements. Moreover, Panerai, Castex and Depaule further indicated that the phenomenon of human appropriation in a given space can be understood as ‘spatial-symbolic systems’ that reflect the ‘habits or groupings of customs that are typical of some forms of sociability’ (Panerai *et al.* 2004: 124). In other words, the ways of achieving human appropriation often form a cultural model which is agreed by the locals. The Versailles morphological study considered that this model can be transformed when the physical configuration of place is changed. Thus, their analysis is in fact concerned with the transformations of both the architectural and the cultural models of a tissue (Claessens 2005).

In addition, following Raymond’s reversal viewpoint on the relationship between space and social practice, Panerai, Castex and Depaule argued that we can study the existing environment for understanding both the spatial typomorphological forming logic and the human experience of

appropriation within it so as to suggest an appropriate contemporary urban design approach. They argued that through the reality of the built environment we can understand ‘the discrepancy between talking about and acting on the reality’ (Panerai *et al.* 2004: x). In fact, one of Raymond’s major concerns in his study was ‘the conflict between people’s choices and the values of professional urbanists’, and this idea was mainly inspired by Lefebvre⁵ (Moudon 1994: 302). As Lefebvre noted, urban changes must correspond to social needs and be founded on anthropological sense (2002 [1968]: 367-368). Based on such ideas, the Versailles morphological approach emphasized the criticism of the relationship between the productive logic of existing urban forms and the social response of appropriation to the production, so as to determine the socially responsible urban form for future design (Moudon 1994: 302-303).

Analytical Approach

In their approach to urban change, Panerai, Castex and Depaule followed the Italian tradition that focused on the transformation of urban tissue combination logic, rather than the Conzenian technique that stressed the regional accretional emergence, change and characteristics. They also divided urban history into periods, as did the other two schools, for the examination of morphological characteristics in each period. Even so, they did not consider the development of the city as a whole, but as a collection of autonomous fragments (Darin 1998: 66). We shall explore this further through their works.

In their 1977 book *Formes Urbaines*⁶, Panerai, Castex and Depaule examined both the spatial and social effects of the transformation of the traditional housing block into the modernist building forms

⁵ Raymond was Lefebvre’s student and a prominent urban sociologist in Lefebvre’s inner circle.

⁶ An English translation of the book is published in 2004 with an additional chapter by Ivor Samuels.

between 1850 and 1950 in five significant modernist developments: the Haussmannian Paris, the London garden suburbs, the Berlage plan of Amsterdam, the Siedlungen of May in Frankfurt, and Le Corbusier's Unité d'Habitation. These studies focus on the issues of urban changes, especially changes in the ways that the urban element of block is produced, organized and used. Their approach to the physical production and organization issues of the block employed a common typological format. With respect to the approach to the ways in which the block is used, they were concerned with the cultural model, the 'symbolic system' in Lefebvre's term, of social responses to the built form in the relationships between centre and perimeter, internal and external, and private and public. Before I further illustrate their studies on the morphological and cultural models in the five modernist blocks, it is necessary to have an idea of the pre-modern traditional block in mind. In fact, they discuss this pre-modern idea as an object of comparison throughout their book, so I shall generalize some of its most significant characteristics here as a reference for comparison in the later explorations.

The traditional block

The pre-modern traditional block was not created, designed or planned; people only created the streets and buildings alongside it. The block itself was just an area surrounded by streets. As we have seen, an urban tissue is composed of a range of streets, or routes, and these routes also form blocks. *Îlot*, 'block' in French, etymologically means 'small island' and that meaning implies the urban area isolated by streets. In this sense, the block was not an architectural form, but rather a group of building plots surrounded by streets. This suggests the traditional typological concept of a block. So before the modernist period, a block was not considered as a homogeneous planned area; just the contrary, it always consisted of interdependent plots and buildings heterogeneously (Panerai *et al.* 2004: 162-164).

The traditional urban block was often multifunctional, comprising a mixture of housing, work- and

commerce-related facilities. Examples of this kind of multifunctional block can still be found today in many British medieval town centres. More importantly, such blocks had a strict division between their perimeter and interior. The perimeter of the block was connected with the street directly and was the place for exchange. It could be accessed easily and was often the place for public representation, and the ways of practice here were controlled rigorously by specific social codes. In contrast, the interior of the block was separated from the street. This hidden space with its looser social codes was where private appropriation took place. So it was common to find gardens, workshops, garages, sheds or depots in the heart of the block. In addition, the traditional block could directly reflect any hierarchical imbalances and social differences. The cultural value of a district often strongly influenced both physical and social practice values in the block, and in this case we could easily identify the local characteristics (Panerai *et al.* 2004: 25, 128). However, this traditional cultural model was transformed as a result of modernist formative operations.

The Haussmannian modernist block

The Haussmannization of Paris was an important moment in urban history, and was an important focus for the work of the Versailles School. I will discuss this material as a means of further elaborating the Versailles approach, and as a means of teasing out the idea of the block as island.

In the mid 19th century, Baron Georges Haussmann was hired by Napoléon III to modernize Paris in order to improve the living conditions, transport and infrastructure in the city. Haussmann set about conducting a massive rearrangement of the urban structure with a series of new road network plans cutting into the existing city (Figure 3.16). He dealt with the whole city from the global level using the planning logics of axes, symmetry and balance. Such logics of planning using straight and widened road networks allowed effective military policing and healthier living conditions (Harvey 2003: 112-113). In addition, broad avenues lined with trees were Haussmann's basic formal vocabulary that

‘functioned like masks, hiding the differences in social status, in districts, in activities’ (Panerai *et al.* 2004: 8). As his planning logics did not consider the history, social or spatial organizational values residing in the existing urban tissue, large parts of the traditional heterogeneous fabric of the city was replaced by homogeneous blocks (Panerai *et al.* 2004: 15-18).

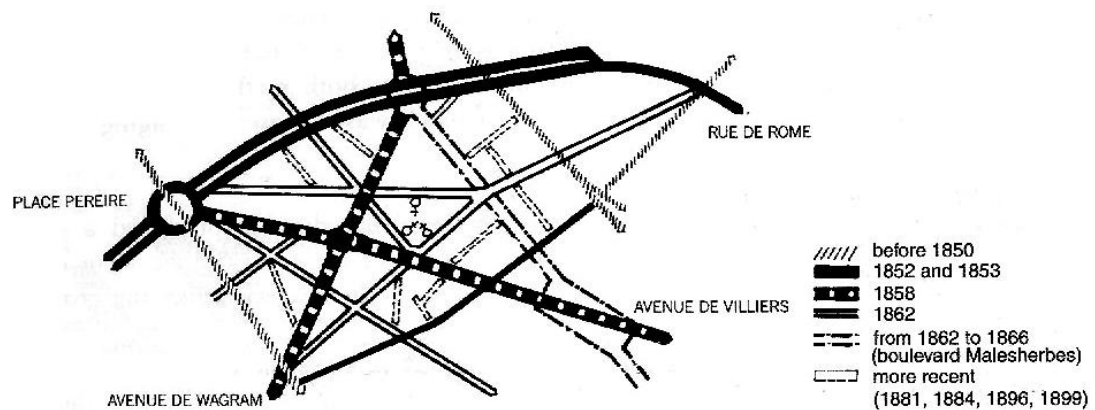


Figure 3.16 Complicated Haussmannian cutting networks: an example of the Wagram district of Paris
(edited from Panerai *et al.*, 2004)

The Haussmannian block had some typological rules and could be systematically operated. Due to the complicated cutting networks, as Figure 3.16 shows, most of the blocks are triangular in shape. As illustrated in Figure 3.17, the area of the block is not big, as the greatest depth of the block is normally about 60 or 65 metres. So we can find the rules for subdividing the block into plots: each plot is at right angles to the street, and the central dividing line in the block is the bisector of the acute angle formed by the streets. The plots in and near the corners are often double-orientation and thus can be accessed from both sides; when a plot approaches a depth of around 30 metres, it is subdivided into two single-orientation plots. There are also some rectangular blocks, and the plots in these blocks are often divided equally. As can be seen in Figure 3.18, the basic element of a rectangular block is an L-shaped building; two Ls can form a U or a T and the block is then composed of these elements (Panerai *et al.* 2004: 18-22). Evidently, the Haussmannian block was no longer an area with the

heterogeneous 'small island' concept mentioned earlier, but a homogeneous planned area.

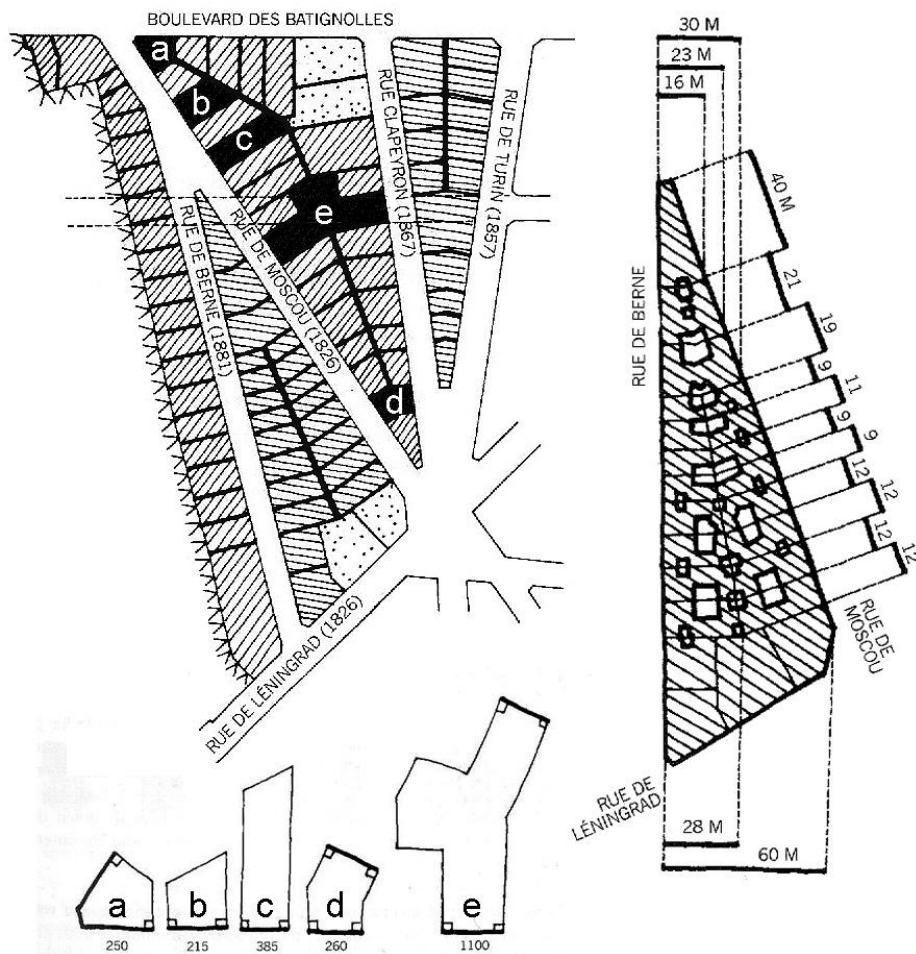


Figure 3.17 Haussmannian typological rules for triangular blocks (adapted from Panerai *et al.*, 2004)

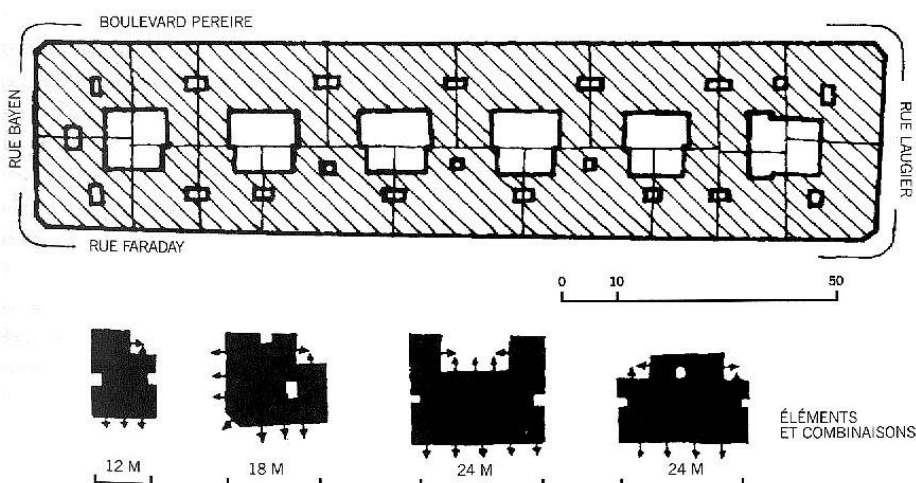


Figure 3.18 A Haussmannian rectangular block and its L-shaped modules (Panerai *et al.* 2004: 23)

In order to provide proper ventilation and light, there were some courtyards to be found in the Haussmannian block, but these courtyard spaces resulted in an awkward social practice model. As can be seen in Figure 3.18, the courtyard is common to three or four plots and the privacy of the space around the courtyard is thus reduced. There are no more private social relationships in and around the courtyards. The depth of the plot is stealthily truncated in social functional terms. Also, the courtyard has no street access and thus cannot become a dumping ground for objects or vehicles, which protects its quality. The ways of human appropriation in the interior of the block are thus also controlled by specific social codes. Furthermore, as illustrated in Figures 3.17 and 3.18, the flats in the perimeter of the block often have proper shapes and they have direct connection with the street without passing through the courtyard space; the flats in the centre of the block, in contrast, have irregular shapes with worse living conditions as they face inward to the courtyard. That is to say, a social hierarchy emerges here under the mask of uniformity of rules (Panerai *et al.* 2004: 22-24).

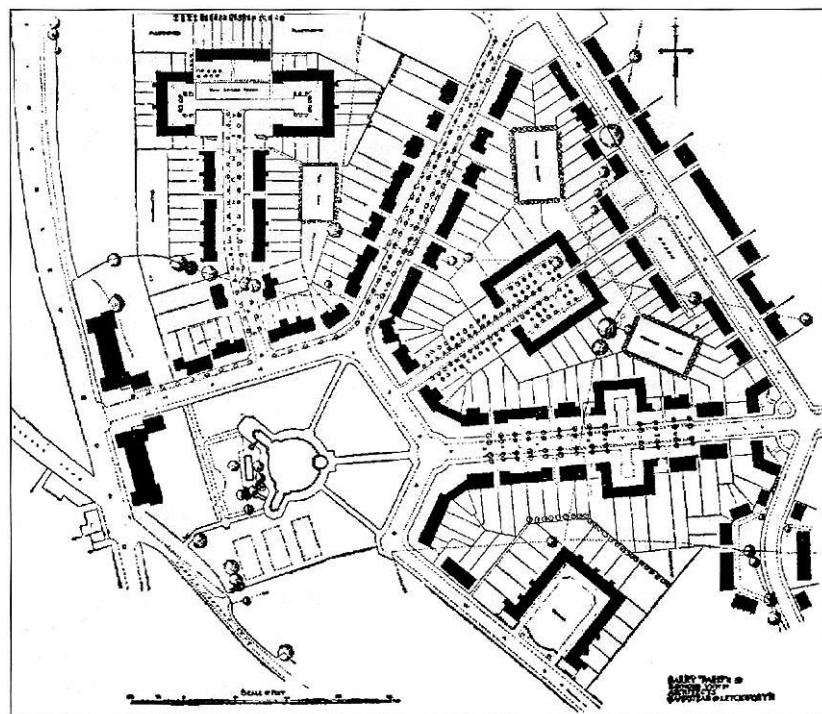


Figure 3.19 Hampstead Garden Suburb (Panerai *et al.* 2004: 38)

Modernist blocks in other cities

We move now to the other four examples as a way of thinking about morphological approaches to the city in the context of modernity. Inspired by Howard's theory of the garden city⁷, the satellite garden cities of London were realized by Raymond Unwin in the early 20th century. The traditional block was now replaced by the 'close' typology. As can be seen in Figure 3.19, the close is a cul-de-sac rectangular courtyard space enclosed by row houses on three sides. The close is semi-public: it is not opened to the public, yet it is not completely private. In Hampstead, as shown in Figure 3.20a, instead of row houses, the close is formed by pairs of semi-detached houses, by which the distinction between front and back spaces becomes blurred. In Welwyn, as shown in Figure 3.20b, the entire close can be closed for the neighbourhood's private appropriation (Panerai *et al.* 2004: 30-55). A new cultural experience was thus produced that changed the traditional idea of the process of moving from the public space to the private space.

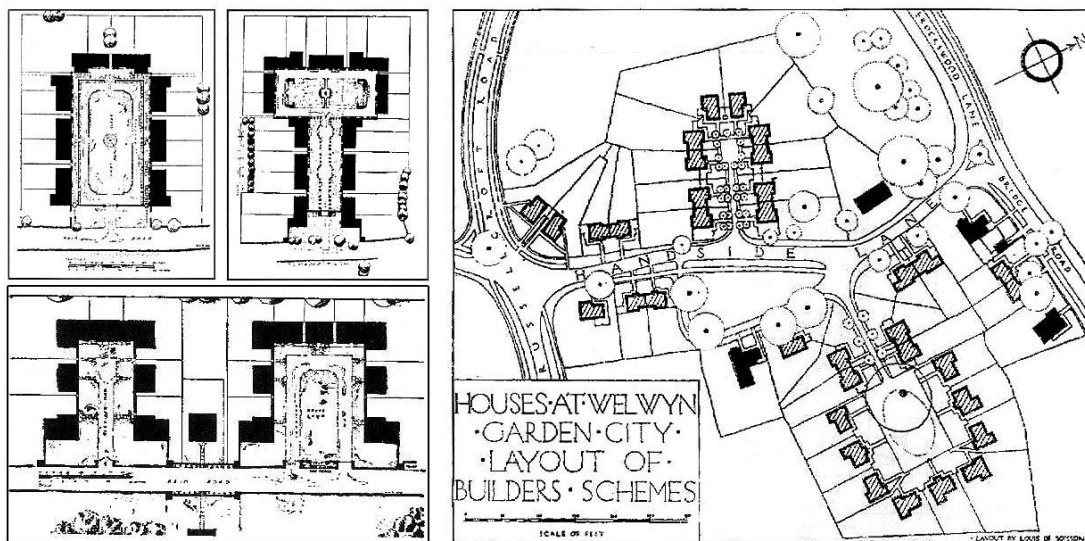


Figure 3.20a (left) Hampstead Garden Suburb 'close' typology; 3.20b (right) Welwyn Garden City
(Panerai *et al.* 2004: 42, 50)

⁷ See Howard's *Garden Cities of Tomorrow* (1945 [1898])

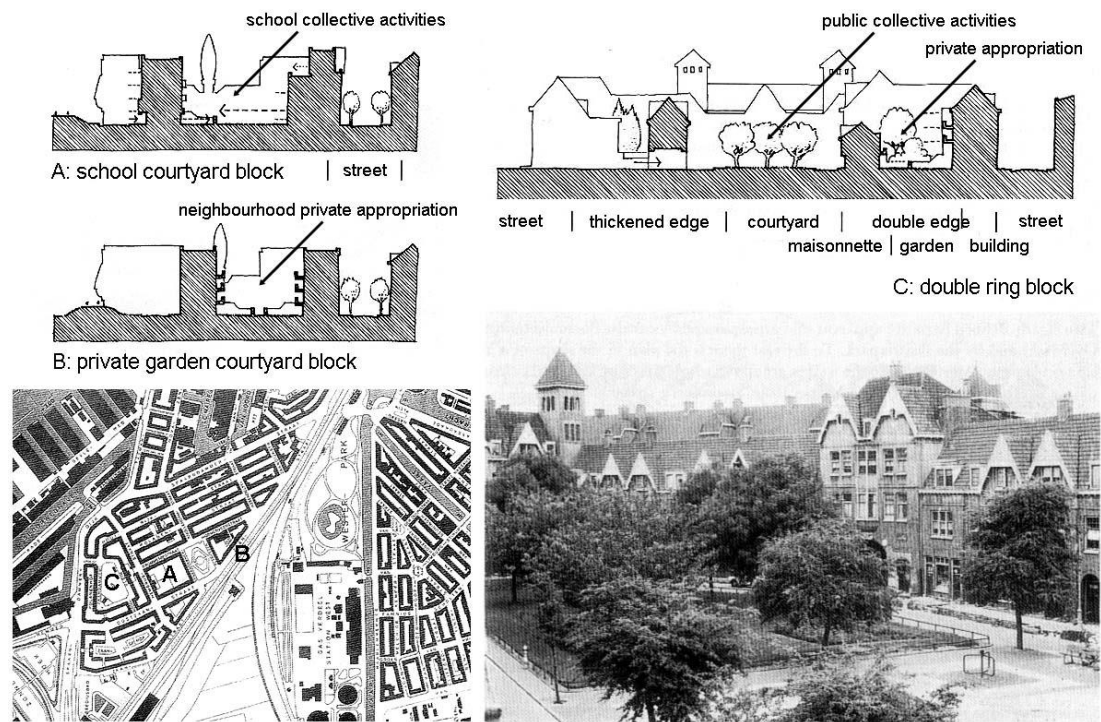


Figure 3.21 Amsterdam Spaarndammerbuurt: blocks A and B designed by M. de Klerk; block C designed by H.J.M. Walenkamp (adapted from Panerai *et al.*, 2004)

The southern extension plan of Amsterdam designed by Hendrik Petrus Berlage in the early 20th century produced the block typology with a courtyard in the centre of the block. This block typology was then employed and adapted by many of the architects who followed. Unlike the Haussmannian block, the courtyard was not just common to three or four plots, but to the whole block. As Figure 3.21 shows, the courtyards of blocks A and B are completely separated from the public and hence allow collective private appropriation. The block's exterior façade reflects the urban order of the street, while private gardens, balconies, greenhouses and sheds can be found at the rear. In the developments which followed, however, the courtyard becomes a public square and that complicates the social logic of the model. In block C in Figure 3.21, the public can access the courtyard through a porch. The collective functions of the courtyard may now include schools, playgrounds, private gardens and balconies. In order to protect the privacy of the neighbourhood, the block is constructed from a double ring of buildings so as to provide a private space for the neighbourhood in-between the ring buildings

(Panerai *et al.* 2004: 56-89).

Panerai, Castex and Depaule also examined other modernist housing projects in their analysis of the morphology of the urban block. In the Ernest May designed Frankfurt suburban housing project, for example, the block is formed by two parallel buildings (Figure 3.22). The back of each row is the front of the next row, and the relationship between front and back is thus confused. Also, the central space of the block is ambiguous in terms of social practice, as it is opened to the public and also belongs to the two row buildings (Panerai *et al.* 2004: 98-106). In Le Corbusier's Unité d'Habitation, the block becomes a vertical slab (Figure 3.23). The social relationship between interior and exterior is redefined since it is completely isolated from its surroundings. The conventional relationship between streets and buildings no longer exists, and is in fact replaced by the relationship between corridors – some of which were intended to function as 'streets' – and flats. Social activities no longer occur on the ground, but in the upper floors (Panerai *et al.* 2004: 114-123).

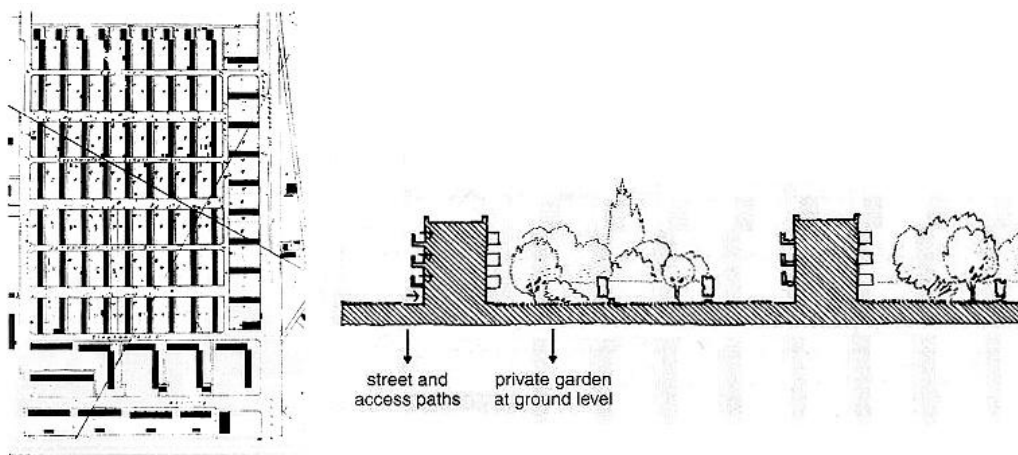


Figure 3.22 Ernest May's Siedlung Westhausen in Frankfurt: cadastral map (*left*) and section (*right*)
(Panerai *et al.* 2004: 103-104)



Figure 3.23 The Marseilles Unité d'Habitation (Panerai *et al.* 2004: 115)

The above explorations of the Versailles typomorphological approach illustrate the differences between the traditional block and the modernist blocks from both the architectural and sociological perspectives. In a traditional block, the collective social practices of family life, work and leisure coexisted interdependently,⁸ and the block could accommodate diverse architectures. With respect to the city scale, these blocks were always a coherent part of the urban tissue in both architectural and social terms. However, as the Versailles School analysis pointed out, in the modernist blocks the social relationships between private and public, internal and external, were changed. The modernist approaches ignored the existing city fabric, established more functionally discrete living spaces, and thus disconnected the blocks from their locations. Furthermore, as is widely known, modernist planning techniques were based on functionalist strategies of separation, or rationalist operations of control, such as zoning and the functionally-planned living spaces within a block, and this resulted in a compartmentalizing of urban life. Evidently, the Versailles analytical approach that works with the material and social issues simultaneously can help us grasp the social dimensions of urban change, and this will help us to understand the problems of a typology so that we know how to improve in

⁸ According to Lefebvre (2008 [1947]), the practices of family life, work and leisure are fundamental elements of human everyday life.

future urban transformations.

Urban Design as a Means of Management of Urban Change

Since the members of the Versailles School disagreed with the modernist approaches to urban design and planning, they argued that contemporary design must be founded on traditional spatial experience. That is to say, contemporary design must enable itself to be an integral part of the existing urban fabric so as to protect the locality of the site, and it also has to allow the continuity of the traditional spatial and social relationships. Therefore, there must be some rules to manage contemporary urban transformations, and under which the design is conditioned to coincide with the local cultural character so as to enable the continuity of the local cultural model of everyday life experience in unplanned conditions (Panerai *et al.* 2004: 158-167).

In the 2004 English translation of Panerai, Castex and Depaule's book, *Urban Forms*, Ivor Samuels added a chapter illustrating the concept of urban design and the movement of New Urbanism so, as he put it, to bring the Versailles typomorphological study in a full cycle. Urban design and New Urbanism are the strategies used in the UK and the US to seek the traditional concept of European cities for contemporary design.⁹ Since urban design is one of the major concerns of this thesis, I shall outline its concept below.

As Samuels noted, in order to fill the gap between the disciplines of architecture and planning, the

⁹ The concept of New Urbanism was introduced in the US in the 1990s to deal with the issue of suburban neighbourhood developments. Inspired by traditional European urban models, it was concerned with the issues of community, organic analogies, culture and traditions and emphasizes the sustainability of the city (Calthorpe 1993: 44). It also affirms the appeal of compact, mixed and diverse use, and a walkable and relatively self-contained neighbourhood (Grant 2006: 3). It can be considered as a planning theory for an ideal neighbourhood tissue typology derived from the traditional urban form.

discipline of urban design was introduced in the 1970s to manage the material environment of a city¹⁰ (Panerai *et al.* 2004: vi-vii). Inspired by the critical viewpoints of Jane Jacobs (1961), Kevin Lynch (1960), Gordon Cullen (1971) and many others in the post-war period, this discipline emphasizes the issue of urban transformation management, in particular, the relationship between the new designs and the existing settlements. Through the management approach of urban design, the traditional local cultural character of a place and the picturesque quality of an historic town can be conserved, and these qualities are also expected to be achieved in new developments. Contemporary designs are thus guided by some rules based on such aims and the developments are therefore proposed to be characterized by a strong sense of place, a diverse architecture, a variety of uses, an appropriate density of development, and a high level of local participation in planning and management, so as to allow the continuity of traditional urban spatial and social experiences (Panerai *et al.* 2004: 174-176).

3.4 SUMMARY

After exploring the three major schools' typomorphological approaches, we can find they share a common attitude to the study of urban form: they are all concerned with the issue of urban changes, and they all agree that such transformations are the consequence of human socio-cultural transitions. Even so, there are some differences in the ways they conceptualize the city. In Conzen's theory, the city was viewed as a whole which develops ontogenetically; for Caniggia, the city was a heterogeneous organism composed of self-contained nuclei with specific and knowable logics of combination; while the Versailles School considered the city to be a collection of fragments. Thus, both Conzen and Caniggia were concerned with the organization of urban structure and its

¹⁰ The term 'urban design' was introduced in the 1950s but it began to be used in such a particular way in the 1970s mainly because of Jacobs's criticism of the modernist approach and Lynch's influential concept of the city image.

transformations – one explores the phenomena of plan units and fringe belts of a city and the other explores the tissue combination logics of matrices and modules respectively. By contrast, the Versailles School appeared to be less interested in such formal matters, but focused more intensely on the internal and external social consequences of specific urban fragments.

The analytical approach

It is important to notice that all the three schools divided the urban history into periods before analysing the morphological characters of a city. Periodization helps us understand the socio-cultural background of urban transformations in specific periods so as to grasp the period characteristics, whether in architectural or urban fabrics. For example, the medieval urban character in Conzen's study, or the modernist block typology in the Versailles School's work. With respect to their analytical approaches, there are some key concepts which can be generalized here, including the Conzenian concepts of 'plan units' and 'fringe belts', the Italian concepts of 'type' and 'tissue', and the Versailles idea of working with the material and social issues together.

The concept of plan units is concerned with the emergence process of urban accretions and their distinguishing morphological characteristics. Fringe belts are the peripheral belt areas of a city in specific periods and these areas are different from the central areas in functional terms. These two concepts are helpful in the exploration of urban changes when viewing the city as a whole, so they are often used for studies of a medieval town, a single core city, or the Old Town of a city.

The Italian concept of type includes the Muratorian and Rossi's ideas. The Muratorian concept of type can evolve under specific conditions and rules, and contemporary design has to be a coherent part of the evolution. Rossi's concept of type, however, is constant; there are also some conditions and rules that can be found in a type, but the evolutionary idea does not exist. In addition, the Italian typological

approach focuses on the combination logics of urban tissues. The concept of tissue is concerned with the combination process and organization characters of routes and the building lots alongside them. Through these we can grasp the local cultural character of a city in material and historical terms.

The members of the Versailles School emphasized the exploration of the cultural model of social response to certain typologies. When exploring social practice, they focused on the social relationships between private and public in the internal and external aspects of the typology. They also compared the modernist social model with the traditional in certain typologies so as to identify the problems of the modernist typologies. This approach helps us to understand how to improve our future designs for socially responsible forms.

These concepts are very important for my later studies on the city of Tainan. The Conzenian approach is useful for exploring the historico-geographical issue of the city centre, the older parts of Tainan; the Italian ideas can help to identify the tissues and their typologies, for example, the block typological character of Tainan; the Versailles School provides many suggestions by illustrating the interactions between social practice and the material environment. We shall return to these in more detail later.

Cultural continuity and urban design

All the three schools discussed in this chapter share a common aim and that is to manage issues of cultural continuity in the context of urban analysis, design and planning. This general aim has come to be important for the practice of urban conservation and the maintenance of a sense of place and of local cultural character in urban design and planning. As Moudon has noted, the Conzenian and Muratorian approaches can help us to grasp a city's *genius loci* (1997: 4). Conzen emphasized the importance of protecting the significant historical fabric, and of avoiding conflicts between the existing fabric and new development, so as to maintain the *genius loci* of the city. Muratori suggested

that contemporary design must be a coherent extension of its typological evolutionary history so that the overall local cultural character can be conserved. Although the Versailles School's approach does not articulate its project in quite these terms – they do not emphasize *genius loci*, for example – it helpfully insisted that new developments must not only reflect the existing local character, but also enable continuity of the traditional experience of human appropriation of urban space.

It is useful, by way of conclusion, to reflect on Kropf's idea that urban fabric is 'a kind of material with its own properties', and 'different materials have their own distinct handling characteristics' (Kropf 2005: 17). The structure of contemporary urban form for many cities is the effect of urban material and cultural history, and this urban structure can form a viable, meaningful and ongoing context for everyday life experiences today. Typomorphological studies can usefully be applied not only to focus on the analysis of urban formative and transformative processes, but also explore the human habits of using these spaces in practice, thus emphasizing the idea of an urban fabric's 'handling characteristics' in a richer and more rounded way (Kropf 2005: 17-18). Accordingly, although the theories of these three schools are different in some ways, their approaches can work together as a set of tools for understanding urbanism in its history and in terms of today's everyday life. Based on such studies, future urban changes will develop with appropriate urban design practice to achieve the aims of cultural continuity.

APPROACHES TO CONTEMPORARY EVERYDAY URBANISM: EVERYDAY LIFE NARRATIVE AND HETEROTOPIA

In the process of urban change, many urban commentators and planners have argued that we must understand, document and manage the various senses of place in a city so as to enable local cultural experiences to be sustained.¹ As we have seen (in Chapters 2 and 3), there are two dominant and inter-related approaches to this issue. The first is urban conservation. In conservation practice, urban elements can be conserved when they are found within the historical traditions and at the same time have significant values for contemporary everyday life (Ashworth 1994: 15-16; Tunbridge and Ashworth 1996: 1-2). The second approach to the understanding, managing and maintaining of places in the context of urban change is typomorphology. This approach emphasizes the wider historical fabric of a city (Moudon 1997: 3).² It is also often the analytical basis for urban conservation work. As suggested at the beginning of this thesis, however, a sense of place is not only derived from the history of a given city, but is also generated from the cultural experiences of contemporary everyday life in that city. When the ways and habits of today's everyday spatial appropriation in a society are distinct from other everyday cultures, they also produce distinctive and noticeable local cultural characteristics. Thus, the urban elements that frame, support and even induce these everyday cultural experiences – even though they are not always strictly historical elements – should be considered as significant urban cultural assets. This approach does not involve preserving these elements as heritage *per se*, but argues the importance of maintaining the contextual pattern of these urban elements so that they might, in turn, help protect the everyday cultural characteristics it supports. According to scholars

¹ See Ashworth and Graham (2005), Conzen (2004), Jivén and Larkham (2003), Larkham (1996) and Norberg-Schulz (1980) for the maintenance of a sense of place, *genius loci*, cultural landscape and experience.

² See Conzen (2004), Caniggia and Maffei (2001), and Panerai *et al.* (2004) for each branch's conceptual details.

working in the Versailles School tradition, any change of urban tissue typology in the material environment changes the cultural model of everyday appropriation within it (Panerai *et al.* 2004). That is to say, to grasp the formative logic of the urban tissue of a place is an important principle for an urban design that seeks to sustain valuable everyday practices and material traits in viable and dynamic ways. In this case, the long-term historical tradition of a place appears to be not the only way to approach the management of urban change. The existing urban tissue of a given city, including modernist or postmodernist elements in some cases, must necessarily be considered in such an examination for the basis of an urban design approach. This way of thinking about conservation practice is particularly important for a postcolonial city such as Tainan. The multi-cultural colonial history of that city means that it is often difficult to identify and secure the meaning or significance of place there. The city seems to suggest that in this aspect of place is found in an understanding of the contemporary everyday appropriations of the existing urban elements as inherited from the complicated and fragmented urban history of Tainan.

Since the Versailles School approach connects material and cultural issues in typomorphological studies and highlights the discrepancy between traditional and modernist urbanisms, it acts as a crucial hinge of the range of literature that I have been examining in the thesis. Building on this theoretical approach, this chapter will go on to extend some of its possibilities for the more particular aims of my project. In particular, I am interested in extending the temporal aspects of their work, those short durations that come into play when social practices are factored into urban analysis. I aim to build on the Versailles School approach by examining the legacy of the concept of everyday life in their work, and by considering two distinctive, though related, analytical traditions: the idea of time-geography as set out initially by Torsten Hägerstrand, and Michel Foucault's concept of heterotopia.

Among the three major typomorphological schools explored in Chapter 3, the Versailles School is the

only one which considers the practical interaction status between the cultural model of everyday spatial appropriation and the typological concept of space. However, they do not take into account the influence of temporal flux on their cultural model of daily social practice, and thus they tend to grasp a generalised form of everyday appropriation of urban spaces and built fabric. As a consequence, many tactics and detailed experiences of social practice in the narrative are likely to be overlooked. This thesis argues that the concept of time-geography can help to strengthen this dimension of the Versailles School's typomorphological approach, as it is particularly useful for the narrative of daily spatial appropriation. To this end, the first section of this Chapter (4.1) will explore the concept of time-geography and some other useful studies on everyday life narrative so as to provide a more thorough approach to the understanding of social interaction between everyday life and the spatial typology.

The Versailles School is also the only one among the three morphological approaches to the city outlined above which is concerned with the differences between everyday life styles in traditional and in modernist urban block typologies. Since their approach to this widespread urban type was inspired by Lefebvre, they criticized the modernist transformation of urban block. As I hope to show in this chapter, Lefebvre's well-known concept of alienation criticizes the social separation phenomenon of everyday life in modernist urbanism, and appeals to an organic, integrated, and traditional everyday life-style in future urban developments. However, as the urban geographers Stephen Graham and Simon Marvin have argued, we must face up to the fact that contemporary cities are assemblages of fragmentary spaces and that it is practically impossible to return them to the traditional syntax of urban fabric (2001: 112). Almost all of today's urban planning concepts also substantially affirm that 'the primary matter of importance is no longer an integral approach, but the cheerful acceptance of

regions as an archipelago of enclaves' (Bosma and Hellinga 1998: 16)³. While the idea of a 'cheerful acceptance' of such conditions is debatable, the general point being made is valid. The concept of a city's organization has been generally changed from a traditional expectation of a relatively coherent urban fabric to the fragmented or 'splintered' (Graham and Marvin 2001) condition of islands, enclaves and archipelagos that are widely observed in cities around the world today. This makes the idea of turning back to the traditional, organic, integrated urbanism seem hardly possible.

In the case of Tainan's postcolonial urbanism, however, a tension emerges between these two orthodox urban stances. It is neither a traditional nor a 'splintered' urbanism. Despite its long, complex and colonial urban history, and the many urban reforms to which it has been subjected, this now modern city strikingly shows a relative coherence in the everyday social practices that it supports. In part this relative coherence, especially visible in central Tainan, relates to the way in which contemporary everyday spatial appropriations within urban enclaves establish a hidden and robust relationship with the pre-modern fabric of the city. Such coexistence of islandized urban fragments and traditional social structures can be usefully understood, I will argue, through Foucault's concept of heterotopia. As we shall see, this concept is particularly useful for the discussion of the social spatial structure with its blurred distinction between modernist separation and traditional coherent contexts. In this case, the concept of heterotopia appears to offer a viable framework to considering the issue of urban alienation (Lefebvre 2008 [1947]) and will be helpful in understanding the sense of place residing in the tensions present in the contemporary urban condition of Tainan. This will be discussed in detail in the final chapter of the thesis. For the moment, in the following section, I will explore in detail the Versailles School approach to everyday urbanism, its relationship to the work of Henri Lefebvre, and the way it might be supplemented and extended through a consideration of Hägerstrand's time-geography. The second section of this Chapter (4.2) will explore the urban

³ Cited in Graham and Marvin (2001: 112).

possibilities of Foucault's heterotopia concept.

4.1 CONCEPTUALIZATION OF THE EVERYDAY

This section will suggest methodological approaches to conceptualizing the everyday for grasping the routine model of social response to a tissue typology on the one hand, and for shaping the narrative structure of everyday appropriation on the other. These approaches will be founded on the Versailles School's typomorphological concept presented in the book *Urban Forms* (Panerai *et al.* 2004), and will be the root of my methodology for the explorations of everyday life practice in the urban fabric of central Tainan. The methodology will be developed in more detail in the next chapter.

The Versailles School is the only one among the three typomorphological schools which is concerned with the issue of contemporary social practice. When typomorphological study is considered as the root of urban design, as Kropf suggested, it should not only emphasize the influence of history over the urban formative process, but should also take into account the social response to the existing urban tissue, because the improvement of future urban transformation must be founded on the 'result', the social response, to what he called the past 'experiment' in an urban tissue typology (2005: 17-18). The Versailles School criticized the practical conditions of appropriations of some modernist urban block typologies so looking at their work helps us learn about the problems inherent in modernist planning approaches and understand how we might improve them. In this sense, to empirically grasp the everyday living experience in a specific urban typology is as important as understanding the influence of history on today's urban form for suggesting future urban changes.

The Versailles approach to the exploration of human everyday appropriation of urban spaces was

mainly inspired by the work of Henri Lefebvre. The relationship between spatial production and social practice or representation is often the major concern in many of Lefebvre's essays, such as *The Right to the City* (2002 [1968]), *Space: Social Product and Use Value* (2009 [1979]) and *The Production of Space* (1991 [1974]). According to Lefebvre, the city is not only the material form of urban change through history, but also the accumulation of human everyday experiences. In this sense, it is significant to grasp the everyday stories of appropriation of particular urban spaces, including how people use them and the resulting cultural models of appropriation, so as to provide feedback on the spatial productions.

	Traditional tissue	Le Corbusier
Access to dwelling	On the façade and in the open air	In the centre and the dark
Shopping	On street ground floor	Upper floor in a gallery
Facilities	On street ground floor or at end of plot	At the top (nursery) or elsewhere
Open space	Internal and hidden (the courtyards)	External and in view (under the pilotis)
The street	Outside	Inside

Figure 4.1 Comparison of the cultural models of everyday social practice in the traditional tissue and in the Unité d'Habitation (Panerai *et al.* 2004: 118)

Although the importance of understanding the everyday urbanism of a place for urban design is emphasized, the Versailles School's approach to everyday life practice is primarily concerned with major everyday events of appropriation in response to the urban typology. As Figure 4.1 shows, in their exploration of Corbusier's Unité d'Habitation they summarized the comparative differences between modes of everyday appropriation in traditional urban tissue and Le Corbusier's vertical urban block. Everyday events such as accessing a dwelling, shopping, social exchange, are the major elements considered in this comparison. This useful summary draws together in general form a range

of possible social interactions in two distinctive urban settings. Yet the narrow range of events that this analysis uses does not access the fullness and richness of the everyday stories of appropriation in such places.

For example, this diagram (Figure 4.1) shows that the everyday event of shopping was, in the traditional perspective, expected to be on the street ground floor, but in the case of Le Corbusier's project it was relocated to the interior floor of the building. It is noticeable here that the Versailles School approach is concerned with the fact of change in everyday life practice but they do not engage with the narrative specifics of everyday life. Their analysis suggests that the ideal mode of everyday social practice follows the traditional urban tissue and thus we should maintain this form in the context of urban change. This suggestion is based on the maintenance of an everyday cultural model instead of relying on past tissue forming rules as the typical typological approach (the Italian) does. Yet we have very little idea of the actors in the everyday life of this urban tissue, who is involved in the making of the sense of place: the elders, youngsters, dwellers or visitors? What time, how often and how do the events take place? These details are probably unnecessary for members of the Versailles School as the information shown in the diagram is already effective for their purpose of making the critique and for asserting the principles of traditional everyday life style for urban design. Yet when considering the cultural experience of today's everyday appropriation of urban spaces as a basis for an approach to urban design and urban conservation, it is necessary to explore the everyday stories in more detail because many human tactics and detailed experiences of appropriation that can regenerate the cultural meaning of a place are, as we have seen, integral to a viable urban fabric.. In short, to protect and sustain a contemporary everyday sense of place, this thesis suggests that we should attempt to access the full richness of stories and routines of daily life so as to understand everyday urbanism appropriately. To this end, I now want to turn to a consideration of concepts, such as time-geography, that are particularly useful for engaging with everyday life stories in greater detail.

The Analytical Approach to the Everyday

In order to grasp the fuller consequences of everyday stories of routine human life in a place, some methodological approaches to the conceptualization of the everyday will be developed based on existing philosophical concepts the theme. The central principle of these approaches is to capture the structural essence of the everyday, including 24-hour cyclical time, so that the living stories can be approached and examined in more systematic and detailed ways. This approach emphasises that everyday structures are not invented, but essentially reside in the given contexts of natural time cycles and institutional systems. These structures can be explored further through the concepts of time-geography and the narrative of everyday tactics. The former suggests a foundation for understanding everyday life narratives in a temporal framework, and the latter emphasizes the process and background of a specific set of events that is culturally significant in the making of the sense of place.

'Everydayness': the routinization of social practice

In the exploration of the interaction between everyday social practice and material environment, time is certainly a considerable factor because it frames the occurrence of everyday stories. Everyday time is conceivably as important as historical time to typomorphological studies, yet is seldom considered in that analytical tradition. Since the clock was invented, human life has been standardized by the units of time and its cyclic system. As Lefebvre indicated, 'everyday life is made of recurrences: gestures of labour and leisure, mechanical movements both human and properly mechanic, hours, days, weeks, months, years, linear and cyclical repetitions, natural and rational time' (2000 [1971]: 18). In such recurrences, the routinization of life is always emphasized in everyday social practice, and this constitutes, as Ben Highmore suggested, the central value of human everyday life – the

‘everydayness’ (2002: 1-5). In this sense, the social codes of a space follow a recurrent system constantly, so the narratives of a place repeat cyclically from day to day, week to week. Since our daily social practices are routinized in these recurrences, we can observe this cyclic cultural model in the context of recurrent stories of human everyday appropriation of urban spaces.

Through the observation of the routinized everyday life in a place during a cyclic span of 24 hours, the differences in everyday narratives between morning, afternoon and evening can be identified. Certainly, the appropriation of a space does not always take the same form throughout all 24 hours in a day. It is important to understand the 24-hour stories in a place so as to grasp not only the general social responses to the spatial typology but also the recurrent cultural form of appropriation of the space. Both of these temporal aspects of lived space are significant to the making of the sense of place and are integral parts of the routinization of daily life.

Movement in the space-time

In fact, in the field of sociological research, the analysis of human 24-hour routine life in space-time has a long tradition, a tradition that is most powerfully encapsulated in the study of ‘time-geography’. The discussion of time-geography relates closely to issues of representation and urban methodology and, as we shall see, connects with the themes of event, space and time in an everyday sense. The roots of time-geography can be traced back to the work of geographer Torsten Hägerstrand (1970). Hägerstrand showed that the trajectories that individuals took in their daily, weekly and monthly lives, what he called ‘life paths’, were not random space-time events, but were usually controlled by certain social codes. As such, individual life paths encapsulating lived co-ordinates of space and time could be traced and offered a useful empirical sampling for a more general investigation of everyday life (1970: 11). To this end, Hägerstrand developed a representational technique that sought to capture the movement of individual actors in time and space. The ‘man-machine’ diagram (Figure 4.2) is a clear

example of his approach. This diagram illustrates a factory worker moving from an unidentified point to a machine in the factory. Once there, he remains static and so the diagram records only his temporal duration in that location. At the same time a meeting is being held in another location. The actor leaves his location by the machine to telephone someone who has just left the meeting. The diagram captures the sense of multiple events in time, and how they might be distinct or interlinked telephonically. This diagrammatic technique can efficiently identify where, when and for how long particular activities take place, and so it is useful for thinking empirically about everyday practices ‘in isolation, experimentally or in some other way distilled’ (Lenntorp 1999: 155).⁴

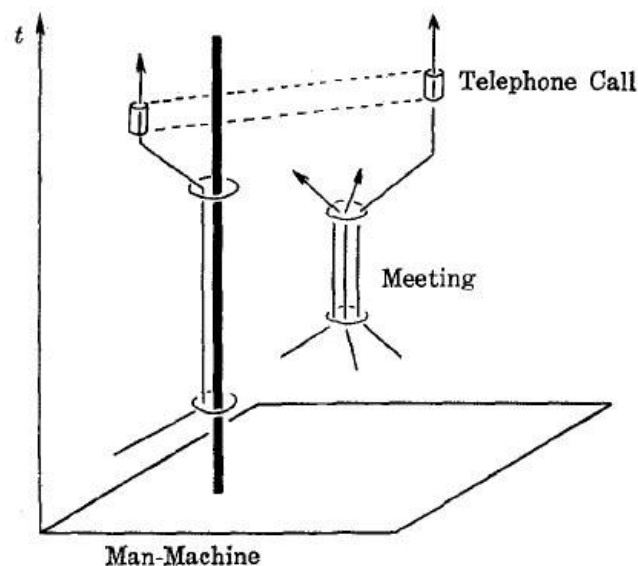


Figure 4.2 Daily paths in a factory (Hägerstrand 1970: 14)

⁴ Time-geography should be understood as a concept of tracing technique, rather than a theory, but it can be used as a foundation to develop a theory (Lenntorp 1999).

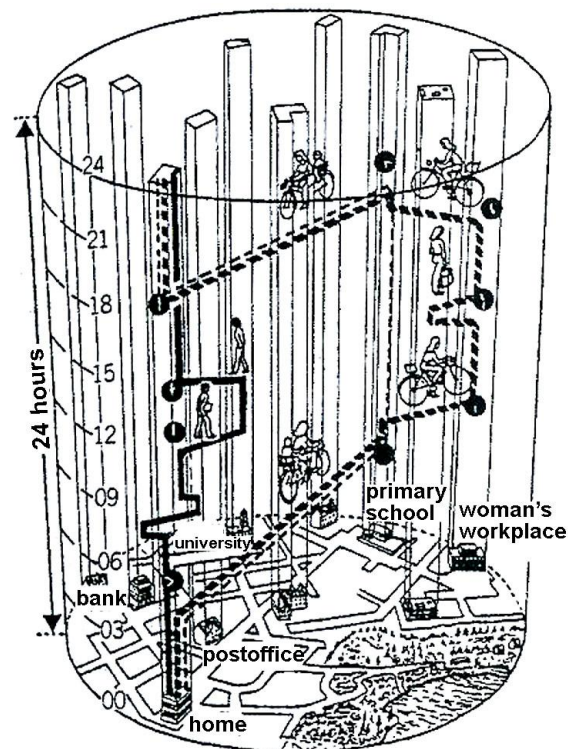


Figure 4.3 The geography of everyday life in space-time aquarium (Mimura 1995: 26)⁵

Time-geographic representation of daily life

In a time-geographic representation, the day path of an individual can be traced in a 3D space-time 'aquarium' with the local map serving as a representation of the spatial base, and a 24-hour time line calibrating the vertical axis. In Figure 4.3, for example, a diagram in this aquarium format illustrates the daily routine movement of a family: the woman cycles with her son away from home at 7am to the primary school, and then arrives in her workplace by 8.30am; at midday, she walks in the vicinity of her workplace for lunch; after work, she picks her son up and arrives home by 6pm. Other scholars such as Kwan and Lee (2004) have developed the 3D space-time aquarium format with GIS technology to capture the complex everyday life movements of various groups of people in a city. As Figure 4.4 shows, this technique allows us to grasp the daily space-time paths of different population groups in a city for comparison, and to understand how the city is used in daily practice and the

⁵ The original diagram in Mimura (1995) was illustrated by a Japanese setting.

24-hour changes of population density in certain locations.

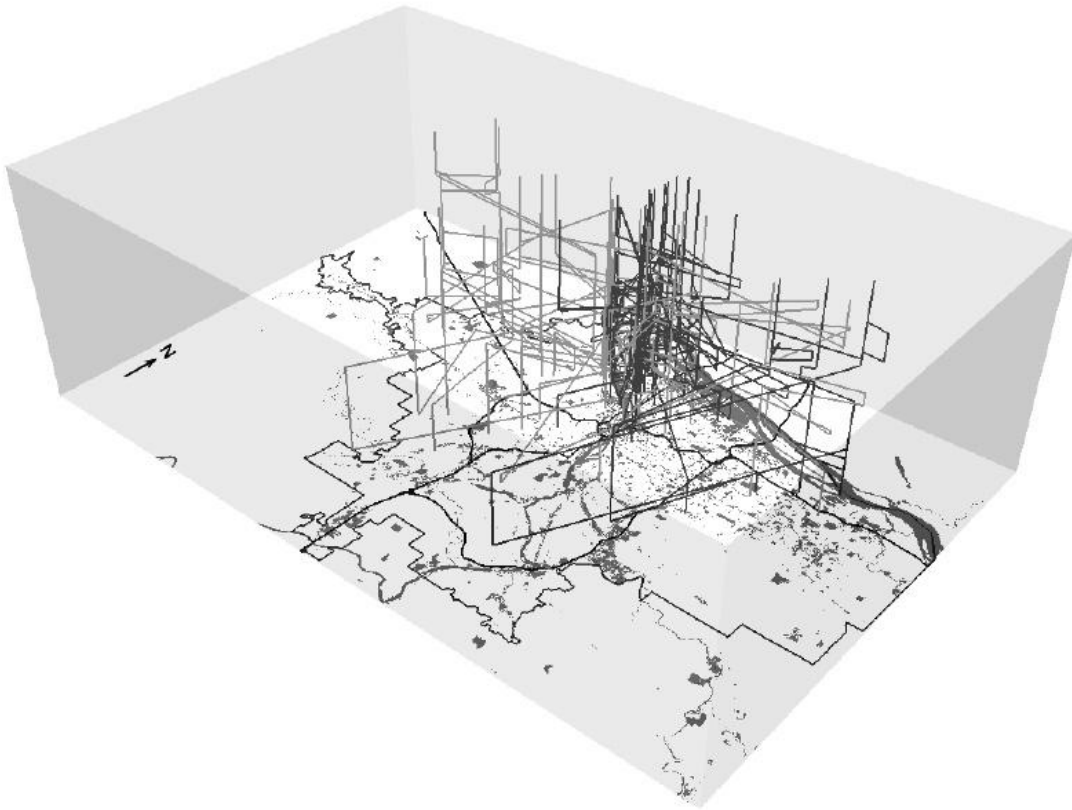


Figure 4.4 Daily space-time paths of different population groups in a city (Kwan and Lee 2004: 60)

The above two examples (Figures 4.3 and 4.4) emphasize the movements, locations and distances of day paths of particular urban actors, and demonstrate the usefulness of this technique for exploring daily movements or population changes in a place. In contrast, other approaches to the issue of temporality and movement in the city are often less precise and merely suggestive. The 2D diagram in Figure 4.5 by Ellegård and Lenntorp (1993), for example, does not record the distances of movements of the paths and only suggests the locations of activities. Here the place of work is only indicated as being relatively distant. The comic-book diagramming style does highlight the general pattern of a 24-hour period in a family's daily routine life. Also, in this diagram, the categories of activity are coded by colour: red is for work; blue is for leisure; green is for home; orange is for school life. Thus,

it tells a more detailed story of one day in the life of a family, and the colour-coding provides a useful comparative picture of different actors in the family. It is apparent that the technique of representation can be very flexible depending on the aims of a study.

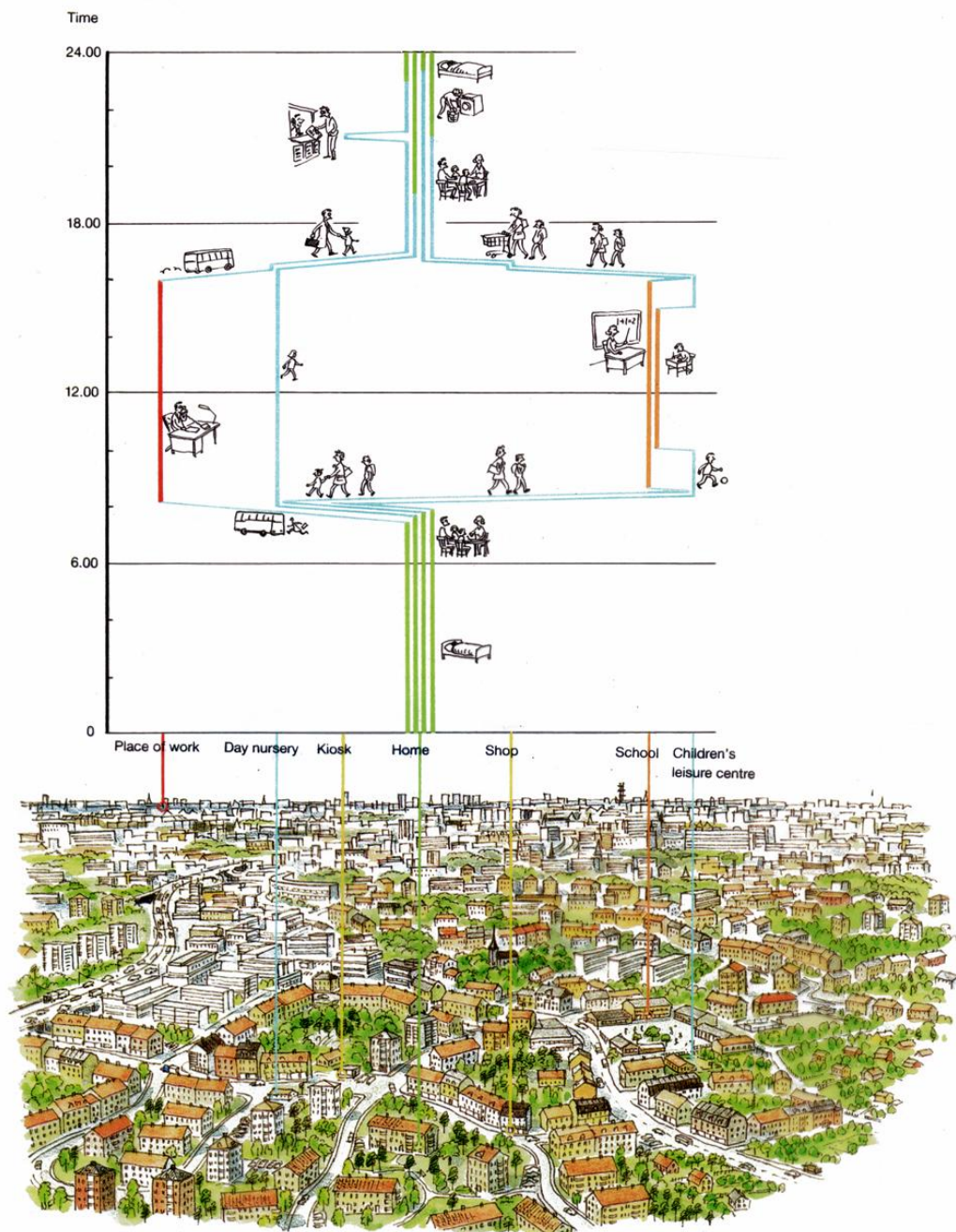


Figure 4.5 One Swedish weekday life of a family with two children (Ellegård and Lenntorp 1993: 25)

Nigel Thrift points out that these analyses suggest a certain ‘bundling’ of everyday activities in particular locations. In the two diagrams in figure 4.6, for example, there are two major bundle structures represented: a household bundle and a school or workplace bundle (Figure 4.6). The household type shows the daily activities of specific family members, such as Figures 4.3 or 4.5 show, and in this case the bundle starts and finishes at the same location; by contrast, the school or workplace bundle, such as the factory life diagram in Figure 4.2 (p.92), shows all the movements gathering together in the same location during the working hours. Yet the bundle structure can be much more complicated when considering a shop, street, square or other complex urban location as its base, and in this case it needs to be analysed carefully so as to present itself as a viable model for daily social practice of a place.

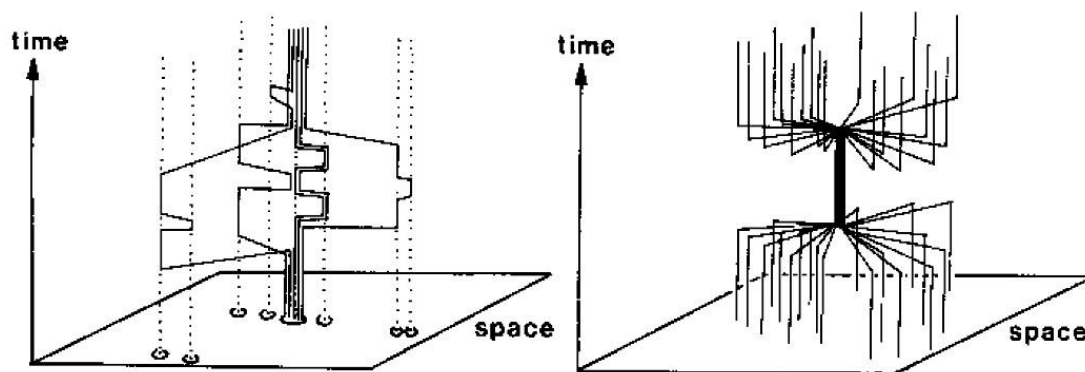


Figure 4.6 A household as a bundle (left); a school or workplace as a bundle (right) (Thrift 1977: 12)

With respect to the study of everyday events in relation to 24-hour time in a place, the diagram developed by the architect Rem Koolhaas for his Yokohama urban design project can also serve as a good example (Figure 4.7).⁶ The making of this diagram was not founded on the concept of time-geography, but clearly is working through similar ideas. As can be seen, it shows the changes of population density of event participation in eating, shopping, visiting markets and so on throughout a

⁶ The scheme of this project was to design the place according to the possible future dominant tissue typology of its surroundings and at the same time allow the place to accommodate the existing everyday event-time model as shown in the diagram (Koolhaas and Mau 1995: 1210-1225).

day in Yokohama. Although the locations of and the movements between these events are not shown, the technique can still efficiently demonstrate a representation of daily social practice in a place. These representational techniques that can reveal the interrelationships between everyday events, spaces and time are useful for exploring everyday social practice in a place and thus, I hope to show, such techniques can work together with the Versailles School typomorphological approach to enable us to engage with contemporary everyday urbanism to the analysis of a given urban fabric in the context of urban design and conservation practice.

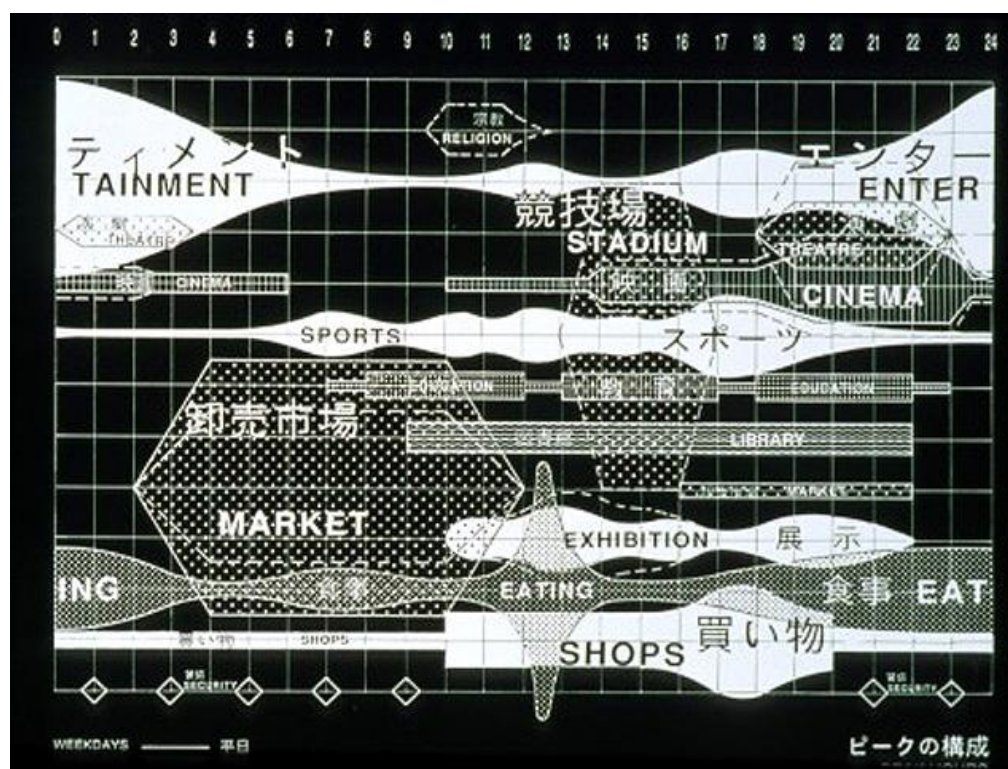


Figure 4.7 An everyday event-time map of Yokohama (Koolhaas and Mau 1995: 1219)

Narrative of everyday life tactics

Since in a place there can always be found a specific mode of everyday appropriation, whether in terms of social structure, event-time or space-time, the everyday activities appear to be controlled by certain social codes. These codes follow the culture, location and typology of spatial configuration and

thus they are very unique to the place. This general principle is employed by the Versailles School typomorphological study to reveal the discrepancies between the cultural modes of everyday appropriation in the traditional and modernist urban block typologies. But we must be aware that under the cultural mode, the human tactics of appropriation are diverse and the narrative specifics can also be very valuable for consideration in urban design practice.

Everyday life is always controlled by specific social codes because we have learnt to interact with the space-time system in which we live through living experiences, as we have seen. The concept of time-geography and its innovations in representing space/time is a useful supplement to this theme.⁷

Yet for the philosopher Michel de Certeau, these structurally conditioned behaviours belong to what he calls the ‘strategies of everyday life’, and we must be aware that there are subconscious behaviours known as everyday tactics resisting the social codes (1984: 29-42). As de Certeau points out, ‘strategies’ and ‘tactics’ are in fact military terms: the former indicates a plan for achieving an overall target; the latter refers to the random approaches used by individuals in the process of achieving the target. Thus, the strategy is determined (by social codes), while the actual tactics are unpredictable. To be precise, the everyday tactics often imply resistance to the social codes, and that resistance is understood as *la perruque*, ‘the worker’s own work disguised as work for his employer’ (de Certeau 1984: 25). This concept reveals that the everyday life-style of a place is substantially controlled by specific social codes, for example the time-geography cultural model, but the narrative modes within it are diverse and cannot be structurally grasped. In de Certeau’s words:

As in management, every ‘strategic’ rationalization seeks first of all to distinguish its ‘own’

⁷ Both the Versailles School approach and the concept of time-geography take this idea into account. Similar thinking on the analysis of everyday life can also be found in Roland Barthes’s *Mythologies* (1993) – which adopts the concept of linguistic semiotics to explain the signification of social practice. Barthes’s concept has influenced many scholars who are concerned with the structuralization of everyday movements in a space – among whom Bill Hillier’s systematic analysis of Space Syntax (1984) is perhaps the best known approach. With regard to urban design, as Evans (2005) suggested, the theory of Space Syntax is sometimes also considered to be contributive to typomorphological studies.

place, that is, the place of its own power and will, from an 'environment' ... a *tactic* is a calculated action determined by the absence of a proper locus. No delimitation of an exteriority, then, provides it with the condition necessary for autonomy.

(de Certeau 1984: 36-37)

This argument indicates that the 'power and will' of a space, the social code, controls everyday movements strategically. But the tactic, with 'no delimitation of an exteriority', is practiced freely and unpredictably to maintain the state of self-governance in the process of making the sense of place. Thus, similar events in the routinized cultural modes of appropriation may have different narrative backgrounds, different ways of appropriation and different roles for different actors in the production of the sense of place. These tactics repeatedly renew the meaning for a space. As de Certeau suggested, everyday tactics are the behaviours of consuming the production of space, and this consumption is not only an act of using, but also the process of producing (1984: 31). In other words, although we can grasp the sense of place by understanding its strategic cultural model of appropriation, the meaning of the place resides in the practice of everyday re-appropriation.⁸ In this case, in order to properly grasp the everyday urbanism for the continuity of the everyday cultural experience, the narrative specifics of everyday tactics need empirical observation. As the recent urbanists Jonathan Hill (2003) and Rahul Mehrotra (2005) have suggested, it is important to investigate the actual stories of experience and condition of everyday appropriation, apart from grasping the everyday cultural model, for building the foundation of architectural and urban design practice.

As I suggested above, the everyday spatial appropriations within urban enclaves of Tainan establish a hidden and robust relationship with the pre-modern fabric of that city. Accessing and studying this condition demands both sensitivities to the material fabric of the city through historical time, and

⁸ The nature of consuming acts can also be explained through the rhizome theory in Deleuze and Guattari (1988: 6-7): the form of a plant always depends on the underneath, invisible networks of roots. This metaphor shows that the sense of place is derived from the idiosyncrasies and processes of daily stealthy human reappropriations of everyday spaces.

through everyday time. The latter allows an appreciation of the ways in which the practices of everyday life sustain the fabric of the city in important ways. Hägerstrand's time-geography is an important supplement to the Versailles School approach to urban morphology because it offers a way of thinking about routines and daily life. A further theoretical concept that I aim to activate is that of the heterotopia. This concept, as I have suggested, is particularly useful for the discussion of the social spatial structure with its blurred distinction between modernist separation and traditional coherent contexts. I will now turn to a discussion of Foucault's idea and how it has been taken up in urban design theory.

4.2 HETEROTOPIA AND URBAN CHANGE

This section will explore the philosopher Michel Foucault's concept of heterotopia, introduced in his essay *Of Other Spaces* (1986 [1967]), and how this concept has been employed in contemporary urban design theory. As I hope to show, this concept will help us to manage some of the complicated social-spatial issues in a postcolonial city like Tainan which, as I have argued, cannot be properly handled by the Versailles School approach alone. The Versailles School approach deals with the problem of modernist urban space by suggesting traditional/pre-modern urbanism as a principle for future urban change management.⁹ But in a postmodern city, as in a postcolonial city, the issue of urban change management is often very complicated and the norm resides in neither modernist (fragmented) nor traditional (coherent) urbanisms, but in the complex cultural models of urban recombination and everyday society. The concept of heterotopia appears to be helpful for understanding this complexity and can work together with the typomorphological approach to urban

⁹ It is important to be aware that the Versailles School was founded in the 1960s and post-modern issues were not yet being taken into account in urban studies at that time.

change.

According to Foucault, utopias imply imaginary ideal societies with no real locations, while heterotopias are the real places that can reflect utopias. As far as heterotopias are concerned, in order to enact utopias, all the ordinary forms that can be found within the culture are transformed. In this case, they are extraordinary with respect to their actual location in cultural terms, but at the same time they are also the foundations of everyday societies (Foucault 1986 [1967]: 24). Since heterotopias do not reside in the past cultural experience, most of them cannot be understood through the traditional urban morphological approaches. In other words, heterotopias are the extraordinary spaces of utopian perfection as manifest for everyday needs and local circumstances of specific societies.¹⁰ In a city context, they often interrupt the coherence of spatial morphology. They are, however, among the key urban elements where contemporary everyday cultural experience survives.

Importantly, heterotopias function as feedback mechanisms for maintaining social balance. In Foucault's words, 'in the mirror, I see myself there where I am not ... a sort of shadow that gives my own visibility to myself, that enables me to see myself there where I am absent ... I begin again to direct my eyes toward myself and to reconstitute myself there where I am' (1986 [1967]: 24). In this metaphor, the world in the mirror (the unreal place) is a utopia, while the mirror itself (the real place) functions as a heterotopia that allows the visualization of oneself and the imagination of an ideal (utopic) image of oneself for adjustment. In fact, Foucault's mirror concept is borrowed from the psychoanalyst Jacques Lacan's theory of the mirror stage (Shane 2005: 234). According to Lacan, the object in the mirror is alienated (what psychoanalytical theory calls a 'split subject') but its whole image can be seen by the subject.¹¹ In contrast, although the subject outside the mirror is a real being,

¹⁰ The design concept of the Panopticon prison serves as a good example for this definition. See Foucault (1979).

¹¹ Lacan's concept of alienation is different from Lefebvre's sociological concept of alienation; it is borrowed from Hegel's phenomenological concept – the separation of one's spirit and body. As the image in the mirror is the

it can only be perceived by itself as a fragmented body – one can never see the real being of oneself as a whole (Lacan 1977: 1-7). Thus, in this psychoanalytic framework, the constituting process of one's ego resides in the tension between our inherent fragmentation (being 'split') and a sense of wholeness which is delivered through various forms of self-confirmation, such as mirrors, other people and various media. It is through the feedback of the mirror or 'reflections' of other people that we are confirmed as subjects in the world. A heterotopia, like Lacan's mirror or other reflective medium, contains a feedback mechanism for self-regulating and self-organizing at a wider social level, helping to drive social change through an unachievable utopic image.

Foucault went on to offer a set of more practical spatial and typological examples of heterotopic conditions. He suggested the three main categories of heterotopia – crisis, deviation and illusion –take various architectural forms: they can be boarding schools, rest homes, hospitals, prisons, cemeteries, cinemas, gardens, museums, festival venues, motel, brothels, ships, and trains for example. The central value in this loose set of examples is that they allow a more direct approach to the theoretical idea in the metaphor of the mirror. In combination, the example and theory are very suggestive. Since a heterotopia literally refers to an 'other space', it implies a space that contains a society culturally foreign to its surrounding world, and at the same time it also suggests a utopic image of the society.¹² Thus, just like mirrors, heterotopias are always situated in the connection between the reality and the illusion. In fact, Foucault's essay was itself incomplete and he was reported to have been concerned about whether it really was a useful concept. Yet others have made use of the concept as a way of thinking about the contemporary city. As Edward W. Soja emphasized, '[despite] the important caveats around Foucault's essay, it nonetheless offers a very suggestive approach to urban analysis' (1996: 154). Since Foucault leaves unclear the role of such a space in city development, as we shall

¹² wholeness of one's body without spirit, it is understood as one's alienated form.
¹² 'Other place' is the literal translation of the Greek.

see, many urbanists, such as Grahame Shane (2005), Michiel Dehaene and Lieven De Cauter (2008), have attempted to explain how heterotopias work in a city context so as to allow this concept to be used as an approach to the study of urbanism.

Heterotopia as an Approach to the City

The concept of heterotopia is often the inspiration for scholars to explain the extra-ordinary everyday cultural contexts of architectural and urban spaces. For example, Arie Graafland (2000) portrayed the city of Tokyo through this concept in order to understand some hidden dimensions of its urban cultural characteristics. Soja (1996) also employed this concept to explore what he termed the 'Thirdspace' in the city of Los Angeles. Shane (2005), Dehaene and De Cauter (2008), however, are probably the only scholars with a background in architecture and urban design who have attempted to theorize the roles of heterotopias in postmodern cities. In their work, the concept of heterotopia appears to be an extension of typomorphology theory in response to postmodern urbanism and urban design, especially of hybrid and multicultural enclave typologies. Their studies are also often concerned with the interaction between the everyday society and the heterotopic enclave. The principles in their theories for grasping the heterotopic typology and the cultural model of social practice within it are helpful for the aims of this thesis.

Stimulus to urban changes

According to Shane, 'the heterotopia is a special form of enclave that contains exceptions to the dominant urban system' (2005: 75). In his account, heterotopias are classified into three types based on Foucault's concept: crisis, deviation and illusion heterotopias. A crisis heterotopia is a separate space with a single-core society of exception (for example, a boarding school, a train); a deviation heterotopia has the function of regulating deviant behaviours (such as a psychiatric hospital, a prison,

etc.); an illusion heterotopia provides opportunities to escape from the tyranny of everyday spaces through fantasies of freedom (for example, a cinema, a festival venue, a motel, a brothel) (Shane 2005: 237-240). According to Shane, these three heterotopic typological characteristics can function not only in architectural spaces but also in urban enclaves respectively along the lines of the urban theories in Kevin Lynch (1981) of the cosmic city (a single-core model), the mechanical city (a rationalist model), and the organic city (a self-organized model with feedback roots) to stimulate urban changes. In other words, heterotopic enclaves are considered as micro cities, the nuclei of urban growth.

Crisis heterotopias are essential elements for urban stabilization. They are single-core, self-contained enclaves with clear edges that delimit 'societies of exceptions' (that are not always included in the everyday ordinary context). As Shane argued, the functional logic of the concept is like the process of doing a jigsaw: in an enclave with clear edges, element pieces are fitted into a large image that is linked to a particular illusory (utopic) picture. According to this principle, for example, medieval street façades were developed under a specific (imagined) syntagmatic system to produce coherence for shaping an ideal landscape. These enclaves often act as important nuclei of a city, and each of them contains diverse functions to satisfy the unique society within it. Cases of this are university campuses, palaces, self-contained master-planned communities, and urban conservation areas (Shane 2005: 247-250).

Heterotopias of deviation develop with a non-hierarchical and infinite rational system to dominate flows and movements in a city. The functional logic of this domination is akin to the top-down powerful monitoring mechanism of Jeremy Bentham's Panopticon prison described by Foucault (1979). A deviation heterotopia is still a single-core enclave, but it releases the development from the boundaries. Unlike the crisis heterotopias, heterotopias of deviation do not develop for the making of illusory images, as their transforming logics are controlled by rationalism. The rationalist urban

structure can regulate the flows that are deviant to the required rational norms for the making of modernist utopic societies. According to Shane, living areas which depend on an inter-central traffic hub, such as railway stations and ports, belong to this type of heterotopia, because these places regulate the traditional values of a city centre by decentralization for the making of rational urban network systems. A commercial or residential grid pattern area which contains many similar spatial units connected by systematic circulation can also be understood as a deviation heterotopia, as within it there is the forming logic that a linear system structurally dominates non-hierarchical cell units which coincides exactly with the aforementioned principle (Shane 2005: 250-254).

Heterotopias of illusion keep the concept of decentralization and networking in deviation heterotopias, but the making of networks is not controlled by rationalist dominations; instead, it develops and flows freely for the making of illusory images (Shane 2005: 244-245). Like the principle of spatial arrangement in a museum or a garden, in a heterotopic enclave of this type, there is in fact no specific logic in spatial combination which can be identified, but the rule of particular 'illusion' codes for maintaining the shifting balance of images and values within an urban system. Thus the spatial formations and transformations are controlled by illusions. Examples of illusion heterotopias are religious spaces, theme parks, shopping villages, Las Vegas's hotels, and slums, as the spatial combination logics in these fabrics are controlled by nothing but illusions such as the faith of religion or the Disney world (Shane 2005: 260-269). These illusory spaces just expose our modern everyday spaces as too organized.

Public space in a postcivil society

Dehaene and De Cauter were concerned more with the everyday social structure than with the material combination logic in heterotopias. According to them, a heterotopia is always a public space

that marks the emergence of a postcivil society. The term ‘postcivil society’¹³, borrowed from Fredric Jameson (1992), suggests a society in an envelope, or an enclave that resides in the tension between authoritarianism and anarchism, functionalism and freedom. That is to say, the structure of this enclave is disordered within specific order; in this society, the distinction between private and public is often ambiguous. According to Jameson, Koolhaas’s *Blade Runner*-like buildings serve as good examples, as free play of spatial appropriation is offered in these projects yet only on the condition of rigid structures (1992: 33). In other words, this society is a secret anarchistic world protected by an envelope disguised as part of the ordinary in a city. In such a postcivil condition, as Dehaene and De Caeter argued, heterotopias can be grasped in four principles:

‘*The reinvention of the everyday*’: heterotopias are purposely arranged spaces for ideal life, such as gardens, museums, prisons and motels, and in this case the spaces inside them are often extraordinary and quite distinctive from their surroundings. In fact, however, there are potentialities of the ordinary hidden in these extraordinary spaces, as they are necessary elements to today’s everyday world (Dehaene and De Caeter 2008: 4). In other words, these extraordinary postcivil societies come to form an important part of the ordinary everyday urban life.

‘*The privatization of public space*’: the behaviours of everyday social practice in a public space are increasingly controlled by rigid codes, and in this case the activities that operate outside of the codes come to be hidden in private spaces. Yet Foucault’s concept implies that heterotopias, as public spaces, allow these extreme private activities, such as illness, sex and death, to happen under protection. For example, hospitals and motels are public buildings, but the activities protected by these buildings are very private. Thus, heterotopias should be considered as neither public nor private. This condition just mirrors Jameson’s postcivil society where free play is allowed in a rigid structure (Dehaene and De

¹³ Jameson terminologically used ‘post-civil society’ (with a hyphen) in his article.

Cauter 2008: 4, 91).

‘Place and non-place’: according to Foucault’s principle, a space without geographical marks, such as a ship or a train, can be considered a heterotopia. As Relph suggested, although a ship or a circus camp does not have a fixed location, it still can be understood as a place in cultural terms (1976: 29). Thus, for the making of a place, the cultural experience is more important than the geographical marks. In this case, a train can be a place of specific stories. That is to say, a heterotopia is not necessarily a fixed-location place, but could also be a space of flows with a networked condition. Accordingly, as Dehaene and De Cauter argued, Manuel Castells’s ‘space of flows’¹⁴ establishes specific heterotopic conditions, usually characterised as ‘non-place’ (Augé 2008). In short, this kind of ‘heterotopia embodies the tension between place and non-place that today reshapes the nature of public space’ (Dehaene and De Cauter 2008: 5).

‘Heterotopia versus camp’: this concept is not concerned with the non-place character of a camp, but implies a space like a camp (for example refugee camps, labour camps, detention centres and secret prisons) where the law is suspended and thus the society is in a proto-political state (Dehaene and De Cauter 2008: 5). Drawing on the work of Giorgio Agamben (1998), Dehaene and de Cauter argue that the social dimensions of this heterotopic condition is often reduced to bare life; for example, the homeless, illegal immigrants and the inhabitants of slums.

Heterotopia and Alienation

In the principles explored above, there is one idea which is particularly important to this thesis’s study, and that is to consider heterotopia as a way to address the issue of alienation. Lefebvre’s concept of

¹⁴ See Castells (2000).

alienation implies the fragmented social condition of modern everyday urban space, and is often explained as the ordinary, regular, rationalist and organized modern urban social context. The postcivil condition can be understood as a management and extension of this kind of experience which, in its heterotopic form, provides a kind of disguise and envelope that supports its integration into the ordinary city fabric. These related concepts will help us to understand how the concept of heterotopia will work with the Versailles School's typomorphological approach to urban change.

Inspired by Lefebvre, the Versailles School's approach emphasizes the difference between the constituting structures of a traditional society and of a modern society – the former being relatively organically integrated, while the latter fragmentary – as they respond to different urban tissue conditions such as coherent heterogeneous tissue and the homogeneous tissue of separation. Behind the Versailles School criticism of modernist urban form and its resulting everyday life-style is the concept of alienation.

Lefebvre (2008 [1947]), inspired by Karl Marx, argued that the concept of alienation implies the separation of the modern everyday social structure.¹⁵ According to him, the everyday is a global structure composed of three basic elements of work, leisure and family life. In his example of a traditional farmer's life, the workplace (farm) is always near the home so that his work can be part of his family life; regular community festivals also make his leisure life fused with his everyday private life. However, such a life-style can no longer be found in modern bourgeois society. The connections between the three basic elements are broken in the modern world. As he noted, work is always the foremost among the three as it is a must for the maintenance of everyday life. The problem is that we

¹⁵ The concept of alienation was originally introduced by Hegel to suggest the separation phenomenon of human consciousness, the separation of self from natural beings, as we must overcome extra issues or sacrifice free wills for settling ourselves in the society (Sayers 2003: 112). Hegel's concept was then employed by Marx (1961 [1844]) to establish a form of materialist humanism; in which the concept of alienation refers to the separations of both the work and the work's products from the worker, caused by the capitalist labour division in the production process. The alienated workers do not work for themselves but for their employers, and this supports the system to exploit themselves continuously.

must have breaks in the work for leisure as breaks offer distractions that compensate for the difficulties of modern everyday life. Thus, according to this analysis, leisure must escape from work and break with the everyday. Work and leisure hence become polarised and cannot be occur concurrently in the everyday. Also, work and family life are separated in the modernist zoning system. This break-up of the three everyday elements suggests the alienation of modern social life, asserted Lefebvre (2008 [1947]: 29-42). In short, alienation implies the over-organized, routinization of modern urban life.

Once the problem of alienation in modern everyday life is exposed, the aim of reducing the degree of alienation should then be considered in the management of urban change. According to Lefebvre, the opposite concept to alienation/fragmentary is disalienation/totality (Lefebvre 2002 [1961]: 183). But, as a number of commentators have pointed out, he never explicitly elaborated what the world of totality would be like and thus the aim of disalienation has a utopian character (Highmore 2002: 127). It appears that there is no possibility of realizing disalienation in a society completely as the alienated form of our material world caused by modernity is very substantial. Even so, the basic account alienation remains compelling and a more modest project that seeks to reduce or ameliorate its effects might be considered. The various urban design approaches that I have discussed above – the return to the traditional concept of a city in the Versailles School, or the new urbanist approaches – appear to be motivated by overcoming the issue of alienation. The idea of heterotopia is perhaps another way out, but one which engages more directly with the fragmentary logic of contemporary urbanism.

The aspect of heterotopias that can be usefully brought to the issue of alienation has already been implied by Foucault, although it is rarely emphasized. According to him, the social value of the appropriation of everyday space is always dominated and formalized by given social and economic structures. As he claimed:

Our life is still governed by a certain number of oppositions that remain inviolable, that our institutions and practices have not yet dared to break down ... for example between private space and public space, between family space and social space, between cultural space and useful space, between the space of leisure and that of work.

(Foucault 1986 [1967]: 23)

In this argument, the given social value of space is configured and designated through a set of 'inviolable' oppositions. This implies that private activities are not allowed to be seen in a public space, and leisure activities are not allowed to happen in the workplace. In addition, Foucault adds, 'we live inside a set of relations that delineates sites which are irreducible to one another and absolutely not superimposable on one another'. This 'set of relations' can refer to the functionalist condition of social spatial structure and that pins the sites with certain values of social practice to the ground in an organized way. As a result, this argument suggests that our everyday life is substantially dominated by the separation of functionalist spaces. This idea coincides with Lefebvre's concept of alienation.

In contemporary society, however, as Foucault suggested, heterotopias are the spaces that are pinned to the ground 'linked with all the others, which however contradict all the other sites' (1986 [1967]: 24). This type of space thus works as part of the regular context but, as explored earlier, its social value of appropriation resides in the conditions of ambiguity, blur and mixture, rather than the clear opposition structure. Thus, in the alienated modern world, heterotopias are disguised as regularities and resist or at least complicate and ambiguate the phenomenon of social separation.

Let us return to the Versailles School's typomorphological approach. Scholars following this approach suggest taking a traditional social spatial value, for example, coherent fabric with a heterogeneous

functional condition, as the principle for future urban change management, as they are aware of the issue of alienation in the modernist urban morphology. But heterotopias provide an alternative solution that suggests coexistence and mixture. For a postmodern city, the issue of urban change management is often very complicated and the norm resides in neither modernist (fragmented) nor traditional (coherent) urbanisms, but in the complex cultural models of urban recombination and everyday society. In addition, as Graham and Marvin (2001) have argued, it is hardly possible in morphological terms to retrieve a traditional urban syntax from the fragmented conditions of the contemporary city. Therefore, in such a city, apart from seeking the pre-modern urban social value, the lens that the concept of heterotopia offers enables us to identify those conditions that are viable, progressive and useful for the management of change and growth in the contemporary city.

Summary

In the light of Foucault's concept, the most significant point for this thesis is that concept of the heterotopia helps identify those everyday spaces that contradict the spaces of alienation in functional and social constitution structures in modern everyday society. They allow heterogeneous contexts to become visible in the rigid modern urban social structure and, as a result, heterotopias can be considered as a way around of the issue of alienation as it is framed by Lefebvre and adopted as an urban question by the Versailles School. Most importantly, this helps to highlight the value of blurred, ambiguous and conflicting social conditions of a spatial typology in the making of the everyday sense of place. Therefore, in the postcolonial city centre of Tainan, through this concept, the interpretation will help approach and study the unique morphology and the society that constitute that urban context. The aim of this approach is not to make Tainan heterotopic, but to use the concept of heterotopias as a lens which allows us to see new conditions in the city as important and as a viable basis for conservation and change in the city.

APPROACHING TAINAN: HISTORICAL AND EVERYDAY URBAN METHODOLOGIES

Having elaborated the central themes of the thesis – conservation, urban morphology and everyday life – through a range of relevant theoretical literature, I shall now proceed to describe the history of Tainan’s urban formation and transformation in general and through a methodological lens (this chapter), and then through a set of detailed case studies of the city centre’s urban block typology in Chapters 6 and 7 that immediately follow. The discussion and reflection on this material including observations of contemporary everyday appropriation of these case-study urban blocks will be elaborated subsequently in Chapter 8. Then some broader discussions will follow in Chapters 9 and 10. The task of this present chapter is to set out some of the principle methodological issues and to offer a foundation for the descriptions in Chapters 6, 7 and 8. This project, as I have noted, aims to contribute to discussions on the management of urban change. But it has implicated an unorthodox combination of scholarly traditions: morphology and studies in everyday life. Such a project has important methodological consequences too, and these are the focus of this chapter. The chapter outlines a set of methodological approaches to the representation and analysis of Tainan in terms of the historic transformations of that city’s urban fabric and the ways in which spaces in this fabric are practiced in an everyday sense. It also considers the limitations of some conventional urban research methodologies and the data that is available on Tainan.

The methodological focus of this chapter will help to connect the theoretical literature explored earlier and the case studies that will be presented in subsequent chapters. The discussion of typomorphology and everyday time-geography is now given an operational dimension. How might these intellectual

positions offer guidance on empirical work? What are the operational dimensions of these, often contradictory, scholarly approaches? This chapter aims to articulate the practical conditions and limitations of employing these approaches. Since the studies of typomorphology and everyday life are concerned with different urban issues, the explanations of practical conditions and limitations will be separated into two sections according to these two topics.

In the first section of this chapter (5.1), we shall focus on the practical issues of Tainan's urban morphology and tissue. I shall place emphasis on determining morphological periods and regional scope of the city, and on the conditions and limitations of obtaining data relevant for morphological study. The city will be mapped for further explorations. In the second section of this chapter (5.2), I shall outline how more time-sensitive techniques used in time-geography are relevant to everyday life scholarship and for my case studies in Tainan. In addition, I shall make a more general case for the importance of visual methodologies in the context of the study of everyday life.

5.1 FRAMEWORK FOR THE STUDY OF TYPOMORPHOLOGY

This section will first consider three important practical implications of applying the typomorphological approach in Tainan: 1) the issue of periodization in the context of the physical transformation of Tainan's urban fabric in history; 2) the ancient city centre of Tainan and the fringe belt; and 3) the condition and limitations of Tainan's morphological data. Then, based on these considerations, this section will illustrate approach to mapping the city's morphology in order to provide the foundation for the case-study exploration.

Morphology and Historical Periodization

In the study of typomorphology, the first step is to define the morphological periods or phases in the urban formative process. In Conzen's concept of plan units, the formative process of a city can be mapped in several phases, so as to grasp the resulting geographical distribution of the period-specific morphological characteristics of building styles, such as medieval and Georgian houses, and of urban fabrics, such as new town and old town street patterns. In the case of the Italian typological concept of phases, instead of using the historic periodization of regimes, differentiation is decided by the transformations of a modular combination logic in a matrix type or a tissue – Corsini's study of apartment building typological processes in Figure 3.9 (p.57) serves as a good example of this approach. Both the Conzenian and the Italian periodization schemes are founded on a coherent typomorphological account of urban change, and that reflects the fundamental principle of typology. Although the form of a city always changes, as Chapter 3 indicated, the changes are conditioned by certain rules that contribute to the concept of type. In this sense, a typological process implies a coherent cultural process in urban transformations. A consequence of this incremental and palimpsestic view of the city, modernist developments are often rejected as being incoherent conditions in the process, rather than being treated as merely another phase.

However, the action of colonial modernization in Taiwan does not just intervene in the conventional typological process, but disrupts the coherence of the existing historically accreted urban fabric and imposes upon it another system by force. Such change in a city, like Haussmann's urban transformation in Paris, reinvents the urbanism and causes a distinct morphological rupture and break between pre-modern (traditional) and modern characters in tissue typology, and thus the period of modernization must be considered as a valid and relevant phase, as the Versailles School does in its studies. In fact, the initial modernization in Taiwan was carried out by the Japanese colonial governors for their imperialist purposes (Hsu 1992). Japan's colonial modernity was thus founded on a

framework alien to the existing cultural experience of this island country. Such a process of modernization often caused an extreme change of urban form. Similar issues could also be found in other Japanese overseas colonies, such as Korea and Liaotung (now a province of China), in the late 19th and early 20th centuries (Wu 2007: 43-45).¹ Such an unusual form of modernity can be termed 'colonial modernity' for the studies of criticism in the complex histories of East Asia (Barlow 1997: 3). In this case, the urbanism introduced under Japanese rule can be understood as 'a project of building colonial modernity', a 'modernity without subjectivity' (Hsia 2000: 48).

With respect to the tension between traditional and modern issues in social practice, in the early 20th century, people were mostly optimistic about this modernization. Yet as Zhuoliu Wu implied in his well-known Taiwanese novel *Orphan of Asia* (2006 [1946])², as the feeling of fondness for the progressive modern everyday life style was founded on foreign ways of appropriation, unlike the delight of Benjamin's *flâneur*³ in his favourite haunt in the streets, this feeling disappeared as soon as the novel's protagonist realized that his favourite 'place' had stealthily become an unfamiliar 'space'. He missed his past everyday life experience.⁴ It appears, in the mid-20th century, that people still sought for the pre-modern traditional urbanism. The critiques of modernist development at that time were also growing in the West; Muratori and the Versailles School were merely the tip of the iceberg.

It is considered nowadays that to return to the pre-modern everyday urbanism from an alienated modern world is hardly possible and, as Graham and Marvin have suggested, we must accept the concepts of enclave and archipelago in today's urban morphology (2001: 112). This is probably even

¹ The Japanese empire adapted the Western modernist concept in its colonies to demonstrate that they were as powerful as the Western imperialists (Ching 2001: 17).

² *Orphan of Asia* (2006 [1946]) is an important work of literature regarding the everyday life of colonial past in Taiwan. It has been translated into several languages, and the English version was published in 2006.

³ See Walter Benjamin, *The Arcades Project* (1999). See also Ping-Sheng Wu (2007) for the comparative discussions between Benjamin's *flâneur* and the Orphan of Asia.

⁴ Tai-Ming Hu, in the tragedy of *Orphan of Asia* (2006 [1946]), felt lonely in the colonized streets and so travelled to China searching for his past delight, the familiarity of cultural experience, but was then discriminated against by the Chinese due to his Taiwanese status. Eventually, he did not know who he was as he realized the impossibility of regaining his familiarity with spatial practice, and he went mad.

truer for a postcolonial city. The extreme change in the urban pattern that colonization brings about complicates any sense of a typological or morphological continuity in the city. In addition, the Taiwanese architectural historian Ping-Sheng Wu has indicated that, following Zhuoliu Wu's story, the subject of this island country created his new sense of belonging through spatial practice and thus, although the place has not returned to its traditional form, it does not end up a placeless space. Instead, a new sense of place with new identity and new cultural experience can be seen in the development of the contemporary city in Taiwan (2007: 241-244). It appears that there is a new form of spontaneous typological process in today's urban morphology founded on the foreign syntax of colonial modernization. This social spatial condition forms a heterotopic urbanism, as will be elaborated at the end of this thesis, and thus the postcolonial period should be considered as a separate phase for exploration.⁵

On these grounds, the process of urban changes in Tainan is divided into three major periods for explorations: the *pre-modern period* (1624-1895), the *colonial modern period* (1895-1945) and the *postcolonial modern period* (1945-today). In fact, the phase 'pre-modern period' can be referred to as the 'pre-colonial period'. Although there is another colonial history, by the Dutch in the 17th century (see Chapter 6), the 'pre-colonial period' normally means the period before the Japanese colonization. So I shall use the term 'pre-colonial period' to describe the pre-modern period at times when the fact of Japanese colonization is considered more important than the influence of modernization in the context.

Historical City Centre and Fringe Belt: Geographical Condition in Morphology

⁵ Post-colonial study has been a very broad interdisciplinary research field stressing the complexity of its social conditions; it is often discussed together with the feminism and post-structuralism in post-modern studies (Moore-Gilbert 1997). This thesis will not explore post-colonial theories, yet it is important to be aware of its complexity among spatial, cultural and social practices.

In Conzen's morphological study, the fringe belt is a common phenomenon in British medieval towns such as Alnwick, while the inner fringe belt of a town is usually the fixation line of its former town wall. Similar phenomena, in fact, can also be found in many ancient cities of different cultures that were once walled. But the morphological characteristics resulting from the walls of these cities may be different from Alnwick's mixed-used fringe belt character. For example, Conzen also indicated that there are fringe belts in Japanese castle towns. The fabrics of Japanese castle towns are principally dominated by their ancient class systems and fortifications, rather than phased stratification. Due to the ancient class system, while the upper classes remained around the castle, the peripheral locations in the town near the walls were occupied by the lower classes, including servants and beggars. The belt area outside the town along the walls or moats was occupied by barracks, stables and riding grounds (Conzen 2004: 168-184). This fringe belt character has directly influenced the urban landscape of today's Japanese castle-town cities.⁶ It is also noticeable that, unlike the morphology of Alnwick, the walled area of a Japanese castle town had been large enough to serve developing urbanism until the late 19th century. That is to say, most of the developments outside the former walls are of modern expansion.

The most significant fringe belt morphological characteristic is that it is often the boundary between the developments of two distinct periods. They can be the medieval and Georgian periods or, like the Japanese castle-town cities, traditional and modern periods. But normally, this characteristic can only be found in a city which has developed with a growth-ring-like process. With its complex colonial history, there is also a fringe belt morphology which can be found in Tainan. Yet, although Tainan was also a walled city before the modernization, unlike Alnwick or the Japanese castle-town cities, the locations of fringe belt are not exactly the fixation lines of the former walls, as we shall see in Chapter

⁶ In Satoh's study of Japanese castle towns' morphological transformations, he concluded that today's castle-town cities in Japan can be understood as a process of evolution from the early castle towns (1997: 18).

6. This belt morphology was formed when many large modern facilities such as hospitals, schools and parks were developed on the periphery of the historical city in the early 20th century. More importantly, this belt area has become the boundary between the historical city centre and the areas developed since the Japanese colonization. Although the fabric of the historical city centre was also reformed by the Japanese, surrounded by the fringe belt, this area is the only place where the traditional fabric can be found in Tainan and is thus where the structures of three major periods overlap. So the fringe belt has defined the area scope for exploration with which this thesis is concerned. The subsequent chapters of typomorphological and everyday life studies will mainly focus on the urbanism of this historical city centre area.

Conditions and Limitations of Morphological Data

In order to elaborate such an urban history, we must have maps of Tainan that can show the areas covering the entire historical city centre area throughout the three morphological periods. In principle, these maps should contain information at two scales: a scale that can display the morphology of whole urban area, and a finer scale that can clearly show the fabric within an urban block. Maps to the former scale will be used for describing the formation and transformation of the whole city, as we shall see in Chapter 6, and maps to the latter scale will be useful for comparing the traditional and contemporary block typologies, as will be explored in Chapter 7. In fact, there are already some academic publications regarding Tainan's urban transformation, such as Chung (2006), Ke (1998) and Wu (2007), and they have well explained the morphological process of Tainan with particular emphases on the transformations of certain streets and districts, or the death and life of former city walls. Some of these studies are concerned with the period from 1624 to 1945, while most of them are only interested in colonial Tainan. My exploration will be mainly based on these sources while highlighting the transformation of urban morphology from 1624 to 2010, and the block typology that

was formed by the process of the Japanese urban reformation in the city centre of Tainan.

Although historical maps of Tainan can be easily found in many sources, such as Chan (2006), Chou (2003) and those academic publications mentioned above, most of the ancient maps drawn in the 17th and 18th centuries appear to be more imaginative or interpretive. They are useful but not so immediately amenable to translation into the strictly Conzenian method in which comparability and sequences of historical data are so important. Some of these ancient maps were not drawn to scale; some of them revealed no information about plot shapes but depicted only street patterns; none of them presented anything about the functions of ordinary properties, highlighting instead only specific landmarks. In this case, some detailed parts of my mappings of Tainan's morphology in the early pre-modern period will be conjectured according to various historical text works and maps of proximate periods. In fact, since the major concern of this thesis is the morphologies of everyday spaces before and after the Japanese colonial period, according to the periodization scheme I have just proposed, it is probably inevitable to have slight inaccuracy in the mapping of early pre-modern Tainan. Certainly, we shall pay more attention to the 19th century and the modern maps. There is enough information for me to make proper maps of the Tainan of the 19th century and of today to a scale that can clearly show the details of typomorphological characteristics in the everyday spaces.

Mapping the City

According to the methodology elaborated above, I have drawn maps of Tainan to two scales for the typomorphological studies of Chapters 6 and 7 to follow. The first series of maps are drawn to a scale that can display the morphology of the whole city centre areas. They are shown in Figures A and B (pp.188-189), placed at the end of Chapter 6, for the exploration of the city centre's formation and transformation. Another series of maps are drawn to a scale that can clearly show the fabric of the

three case-study urban blocks that will be explored in Chapter 7, shown in Figures C, D and E (pp.218-220).⁷ Although there have been some studies regarding the history of Tainan's urban transformation, such as the academic publications mentioned above, this is probably the first time such a study has been made based on maps that have been redrawn to the same scale throughout all periods of the city's morphological history from 1624 to 2010. With the same scale and technique of representation, these maps will help us to explore morphological changes more efficiently and will also have better comparability. Since this is an original set of drawings based on a range of existing maps, diagrams and texts, it is necessary to explain the reference background to justify their reliability.

Maps in Figure A

As can be seen in Figure A (p.188), there are four maps showing the growth-ring process of urban formation of Tainan in the pre-modern period. They represent Tainan in 1661, 1683, 1752 and 1807. In these maps, according to the year the map represents, the areas which had been densely developed with buildings and streets are shaded in gray, while the areas which had been relatively undeveloped are shaded in light green. The older and newer fabrics are respectively shaded in darker and lighter grays, so as to show the growth-ring process in urban morphology.

The base map for these drawings is the 1875 map of Tainan in Camille Imbault-Huart (1958 [1893]), shown in Figure 5.1, which was the first street map of Tainan to scale.

⁷ Lying at the end of the chapters, these maps are printed on A3 sheets that can be always spread out for reference when reading the main texts.



Figure 5.1 Tainan in 1875 (Imbault-Huart 1958 [1893])

Figure A1 (p.188), a map of Tainan in 1661, shows the outcome of the initial development of Tainan by the Dutch during the period from 1624 to 1661. In this map, the determination of the city's then coastline location was based on the studies of Chin-Cheng Ke (1998), Shian-Far Kung (1991), Ping-Sheng Wu (1997), a map drawn by Cornelis Jansz Ploekhoy in 1652 collected in Chiang (1997), and an anonymous ancient map drawn in the 1640s collected in Chou (2003) and shown in Figure 5.2.⁸ The coastline location shown in these works is in fact slightly different, so the map in Figure A1 (p.188) basically attempts to represent the most significant characteristics, and these have been emphasized. According to Chin-Luan Hsien (1962 [1807]), in the 1660s the waves of the Taijiang lagoon could break directly onto the base of Fort Provintia (1, Figure A, p.188), and the then main street ran eastwards from the waterfront. These two characteristics were very important to the then

⁸ The original of this anonymous ancient map is in the National Library of the Netherlands in The Hague. It has also been edited and is displayed as Figure 6.2.

built landscape and thus have been clearly shown in my map. In addition, the grid formed by the east-west main street of around 300 metres long crossed by three secondary streets can frequently be found in ancient maps, for example the maps of 1652 and the 1640s mentioned above, as can be seen in Figure 5.2. Thus it is specifically emphasized in Figure A1 (p.188). The main street of this grid had then become the heart of the main axis of the city in the subsequent developments.

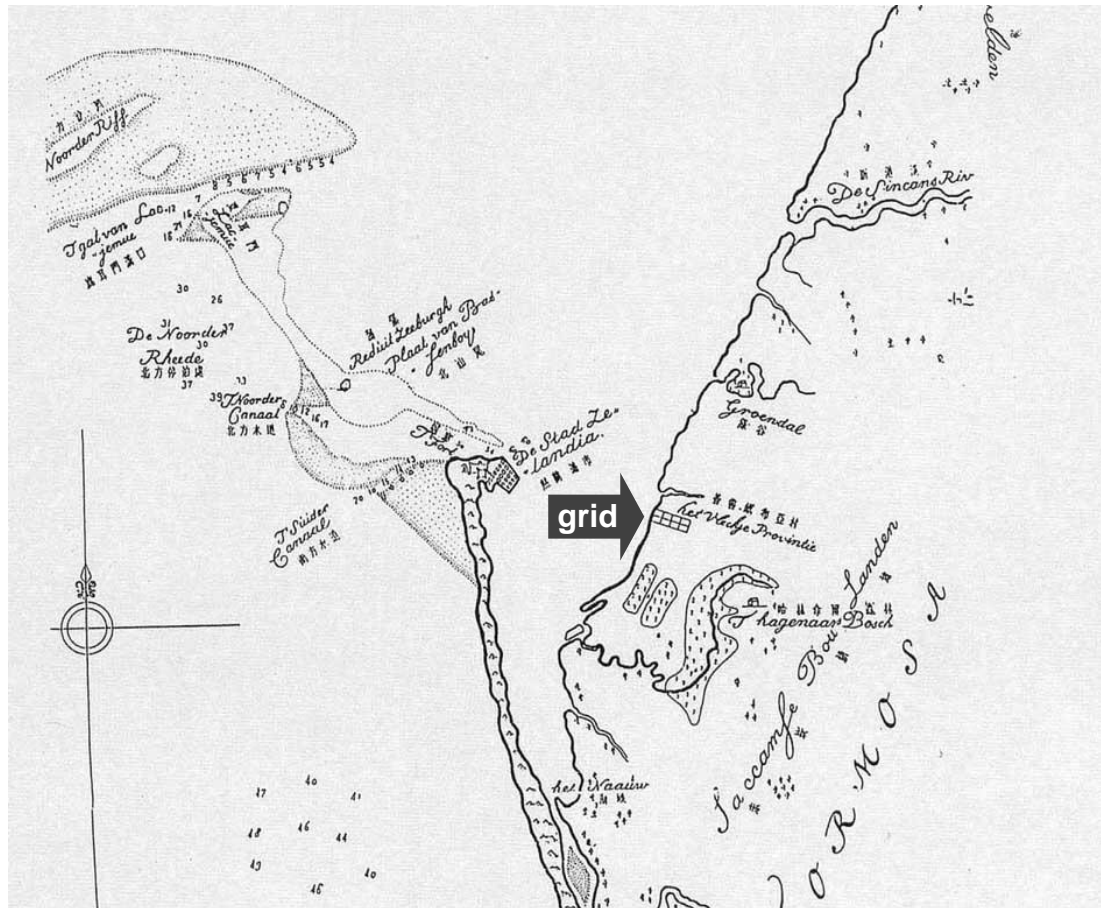


Figure 5.2 Tainan in the 1640s (Chou 2003)

Figure A2 (p.188), a map of Tainan in 1683, shows the outcome of development under Koxinga's rule during the period from 1661 to 1683. The making of this map was mainly based on the study of Koxinga's Tainan in Ke (1998), the historic street survey of Min-Lin Hung (1979) and an ancient drawing of 1720s Tainan in Wen-Da Chen (1993 [1720]) shown as Figure 5.3. Hung's street survey

(tabular data of estimated year of street establishment) was important to the identification of developed areas because an area without a street implied that it could be relatively undeveloped. Also, although Chen's ancient drawing was made almost 40 years after 1683, as can be seen in Figure 5.3, it clearly showed a very clear cross-axes pattern and that provided a clue about what the street pattern might have been like in the late 17th century. In addition, as shown in Figure A2 (p.188), there was a daily farmers' market on an area of open ground to the south of the city. According to the then everyday life stories in Yu-Ying Chiang (1993 [1685]), Kung-Chien Kao (1960 [1694]) and Teng-Feng Chen (2005), this market was situated in front of Confucius Temple (which faced South) and was important to the then everyday life of the city. But its size and shape have never been specified, so in my map it has just been represented by a circle. According to Chen (1993 [1720]), the market no longer existed by 1720, due to urban expansion and the change of urban functional condition.

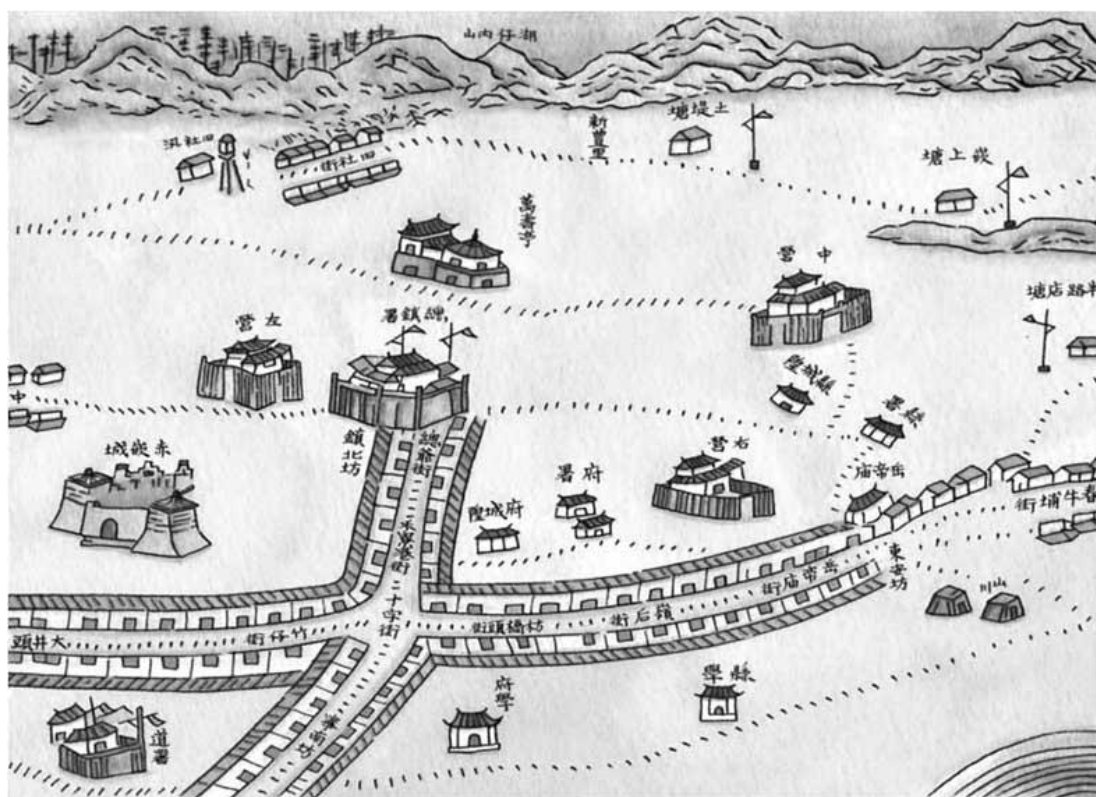


Figure 5.3 Tainan in 1720 (Chen 1993 [1720])

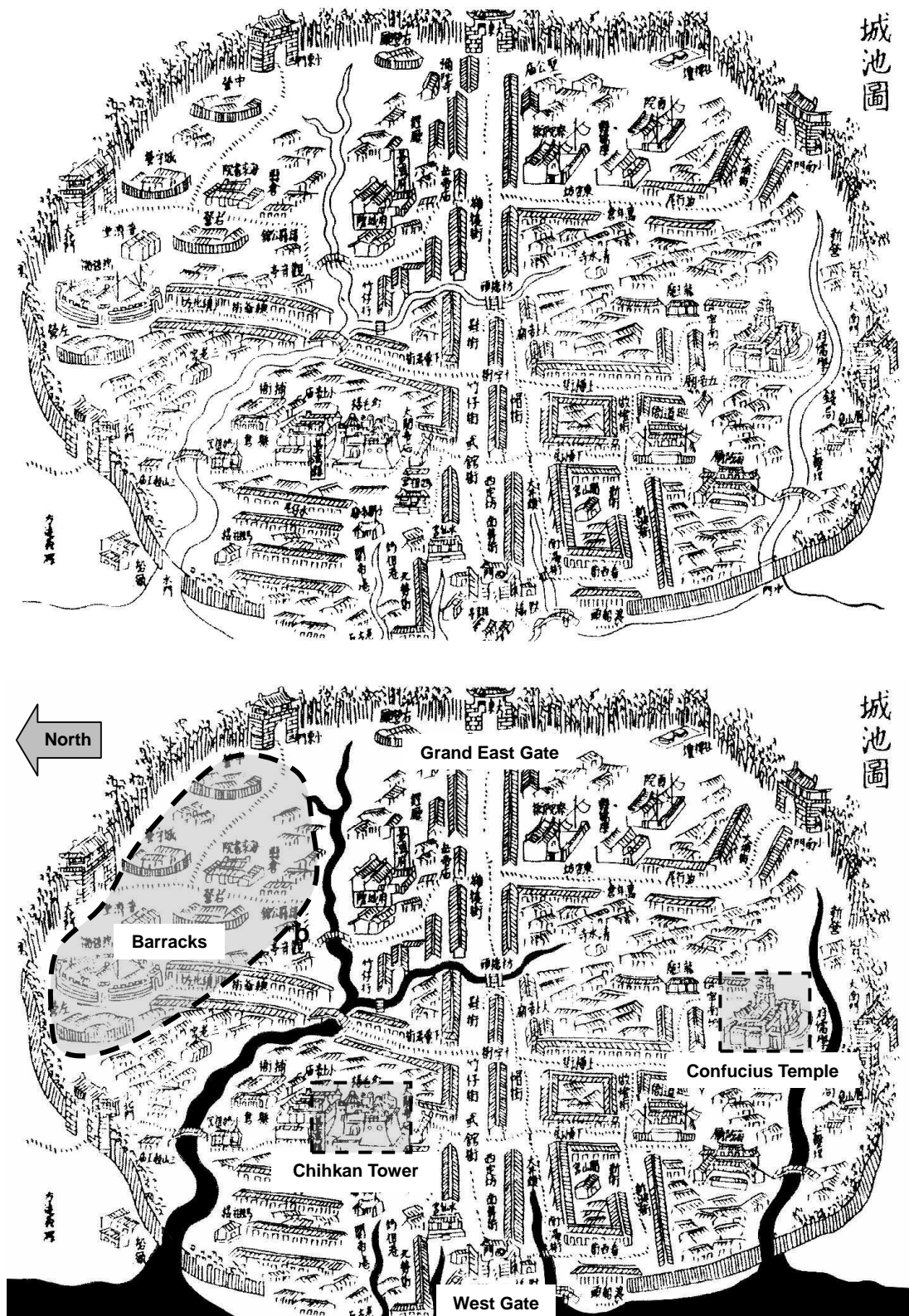


Figure 5.4 Tainan with wooden city walls in 1752 (Wang 1961 [1752])

As we will see in greater detail in Chapter 6, the first city walls were constructed by wooden palisades in 1725 and strengthened a number of times in the following decades. The walls can be seen in Figure A3 (p.188), the map of Tainan in 1752. The making of this map was based on the ancient drawing of 1752s Tainan in Bi-Chang Wang (1961 [1752]), the first map of Tainan that properly showed the street and building fabric, shown as Figure 5.4. Although this ancient map was not to scale, it clearly showed that the areas near the north walls were occupied by barracks, while the densely developed urban area was located between two streams with a main axis connecting the Grand East Gate and the West Gate. These fabrics were redrawn to scale in the map at Figure A3 (p.188). In this redrawing work, the original shapes of coastline and city walls were traced according to the study of Wu (1997).

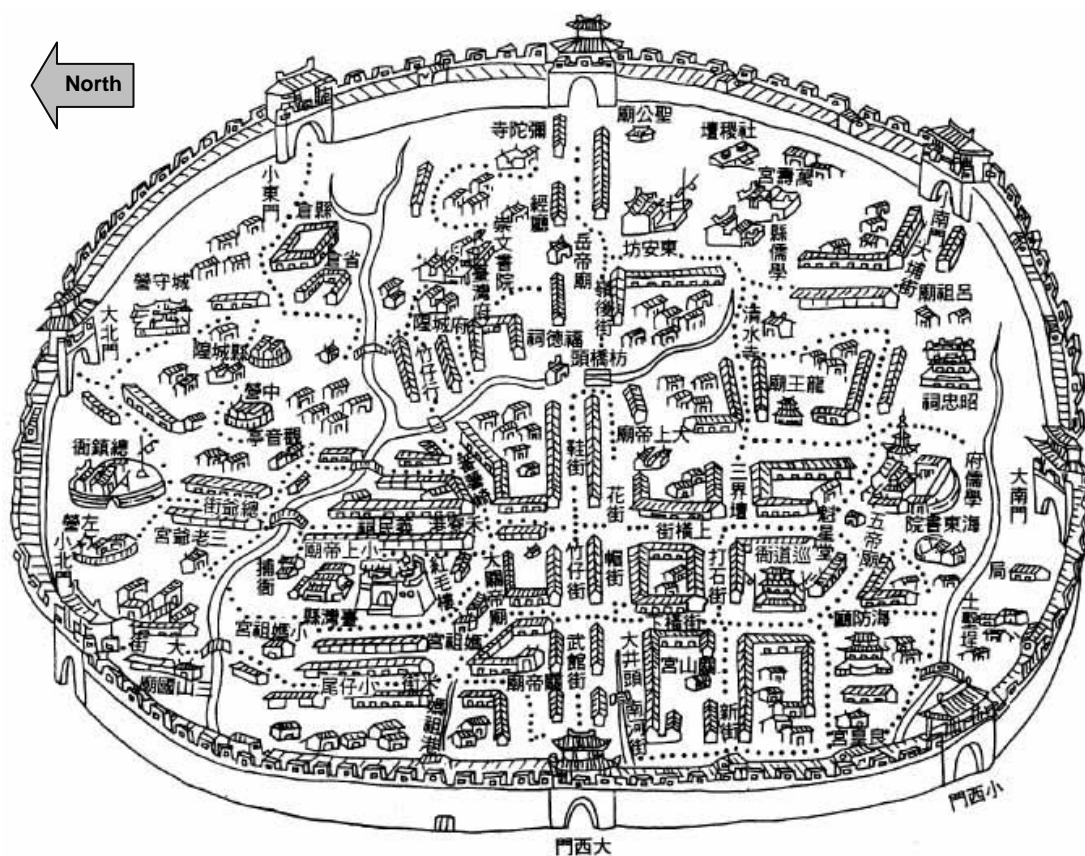


Figure 5.5 Tainan with pise city walls in 1807, an edited version of Hsu (2005)

The 1807 map of Tainan in Figure A4 (p.188) mainly relied on the 1807 drawing of Chin-Luan Hsien (1962 [1807]). An edited version of this drawing by Shu-Chuan Hsu is shown as Figure 5.5. This edited version clarified all the street names on the original drawing and thus is helpful for understanding the fabric in relation to my mapping. By 1807, the wooden city walls had been replaced by pise (rammed earth) walls with wooden West outer walls, although the latter were excluded from Hsien's drawing. The shape of the pise walls was already shown on the base map (Figure 5.1, p.122) which I used, and the outer walls were drawn according to, as Figure 5.6 shows, Wu's diagram of the transformation of Tainan City's boundary (2007: 89) and the study of the historical Tainan City walls in Shih (1985). In addition, due to the retreat of the coastline, a canal fabric on the coastal area had appeared by that time. Part of this fabric was already shown on the base map (1875 Tainan) which I used, but, as can be noticed by comparing Figures A4 (1807 Tainan, p.188) and B1 (1875 Tainan, p.185), in 1807 the canals went deeper into the densely developed area, the Five-Canal area (22, Figure A, p.188). The drawing of this 1807 canal fabric was based on the survey of 1825 of the canals' condition in Hung (1979), as shown in Figure 5.7. In Hung's survey, a list of the streets established during the period from 1752 (Figure A3, p.188) to 1807 (Figure A4, p.188) can also be found (including the outer walled area excluded from Hsien's drawing), and that was helpful for the determination of new developed areas on the map.

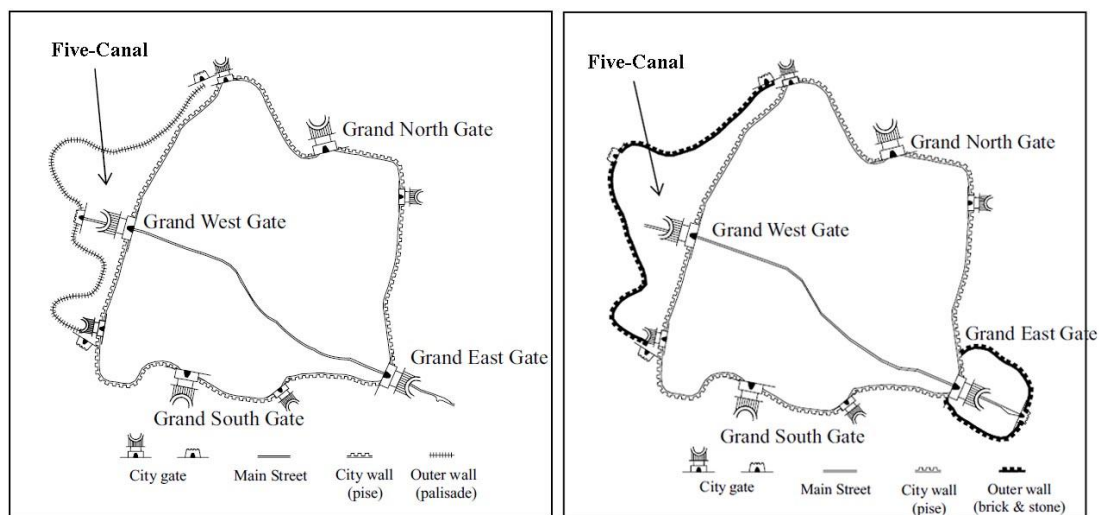


Figure 5.6 Tainan City walls in 1805-1835 (left) and 1836-1895 (right) (Wu 2007: 89)

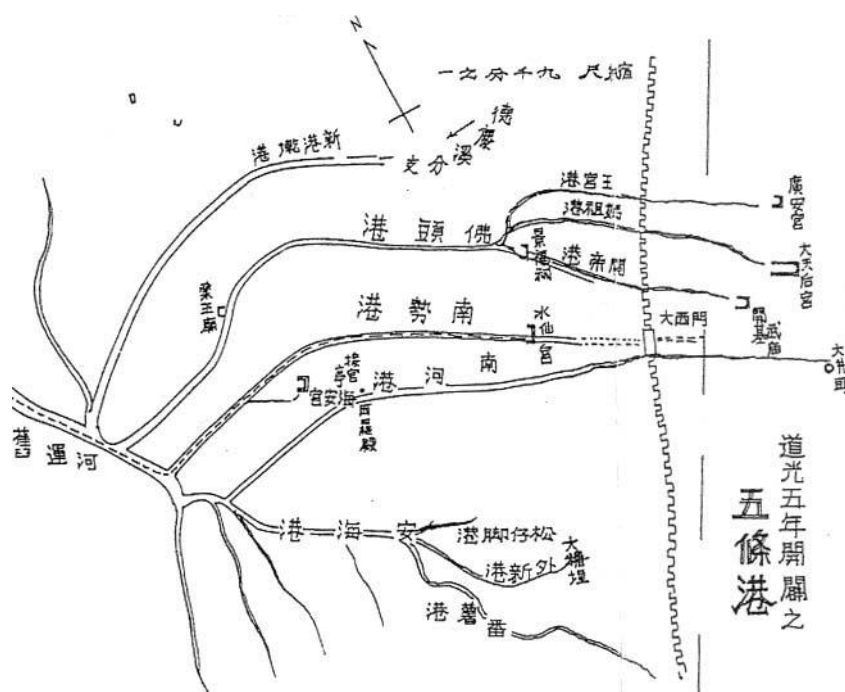


Figure 5.7 Canal fabric of Five-Canal area in 1825 (Hung 1979)

Maps in Figure B

The maps in Figure B (p.189) represent Tainan in 1875, 1910, 1945 and 2010. These maps show the process of urban change from a relatively coherent state to a fragmented condition due to the colonial modernization. Since the base map shows 1875 Tainan, the drawing of Figure B1's map (p.189)

mainly followed the base map, including the fabrics of streets, canals and city walls. There is also a useful 1875 map of Tainan edited by Ke (1998), which is shown as Figure 5.8. Based on Ke's research, this map shows the fabric of building plots in 1875, and thus it was considered as a reference for shading the then densely developed areas in my map.



Figure 5.8 Tainan in 1875 (Ke 1998)

Figure B2 (p.189), a map of Tainan in 1910, shows the initial change in the city made by the Japanese to create a better traffic and health environment before the radical urban reformation. The making of this map was mainly based on the map of 1907 Tainan collected in Chou (2003).⁹ As can be seen in Figure 5.9, this map clearly shows the built fabric of Tainan and was very useful for my mapping work. In addition, Min-Fu Hsu (1995) gave an illustration of the transformation of the city walls and

⁹ The original is in the National Taiwan Library.

land use condition under the Japanese colonial modernization, as Figure 5.10 shows, and that was helpful for making the maps of both Figures B2 and B3 (p.189).

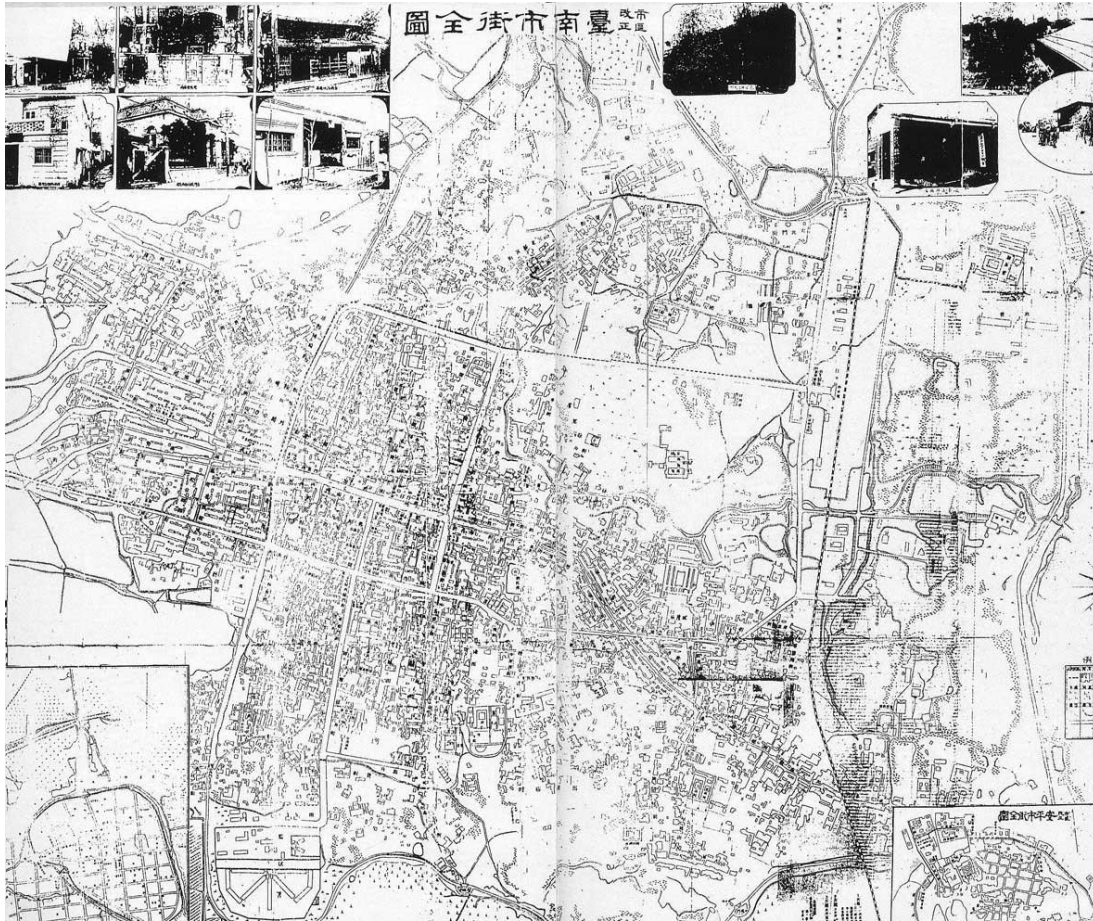


Figure 5.9 Tainan in 1907 (Chou 2003)

The drawing of the map in Figure B3 (p.189) mainly relied on Figure 5.10's illustration of Hsu's (1995) map and the US Army map of Tainan in 1945 shown as Figure 5.11. Hsu's illustration was already clear enough for tracing the fabric on my map. The US Army map showed the densely developed area (shaded in gray) of Tainan by 1945 and thus was also very useful. Finally, Figure B4 (p.189), a map of Tainan in 2010, was drawn according to Google Map, contemporary urban plan maps, and my own field investigation.

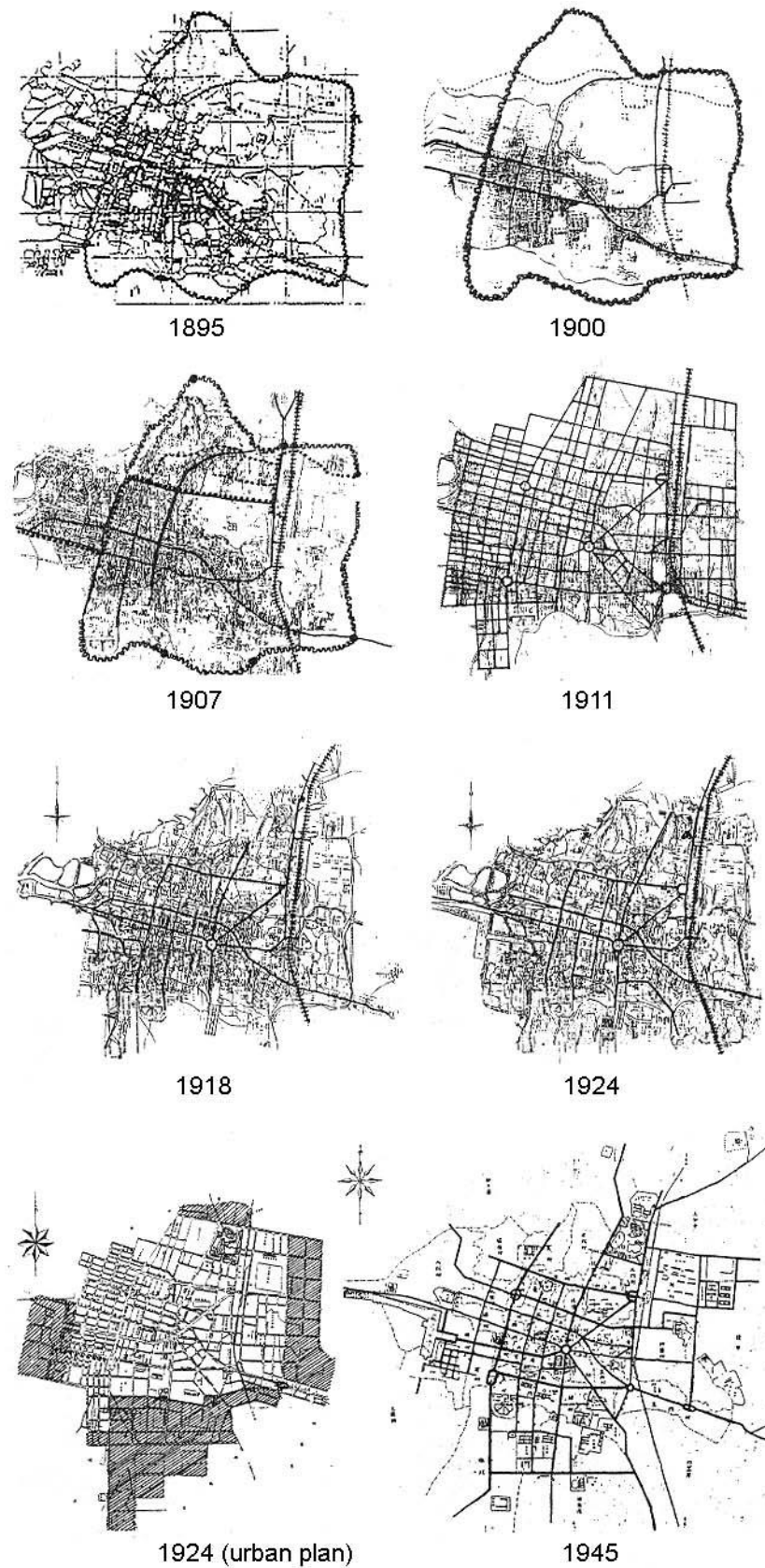


Figure 5.10 Transformation of Tainan from 1895 to 1945 (Hsu 1995)

provided by Tainan City Government.

As we shall see, a set of three urban blocks focussed on temple courtyards will be the spaces that I am going to explore the everyday life of Tainan. Like Giambattista Nolli's map of Rome, the temple interiors of these Tainan blocks are described as cavities in the urban fabric so that their relationships with the city can be clearly grasped. With these maps, we are now ready for an exploration of the typomorphology of the everyday spaces in the city centre of Tainan.

5.2 ENVISIONING EVERYDAY LIFE IN TIME-GEOGRAPHY

The major idea of time-geography, as we saw in Chapter 4, is to capture the interrelationships between everyday events, spaces and time in a diagrammatic form. In terms of my case studies, this kind of representation will emphasize the everyday event-time changes of a specific location, the temple courtyard. But because the spaces we are going to observe are in public use, the representation is conceivably rather complicated. Thus, we must have a proper framework for this representation.

An urban block of central Tainan often contains a temple with a courtyard. Since this study is concerned with the relationship between the block typology and the everyday spatial practice within it, the movements inside the block appear to be the most important urban phenomena to be explored. As far as the movements in a block are concerned, the temple courtyard is probably the most appropriate space for observation. Just like the focus of the Versailles School's studies, the everyday life in a courtyard of a block is always one of the most important issues to be discussed. This space is often the centre connecting the inside and outside of a block, and is ambiguous in its private and public status; it appears to be where the heterotopic condition of an everyday society resides. Therefore, the case

studies of this thesis will explore the 24-hour stories of temple courtyards in the urban blocks in order to enable us to grasp the cultural model of Tainan's contemporary heterotopic everyday life.

The 24-hour everyday appropriations of the temple courtyards will be represented by the time-geography technique for comparative examination. Although the typical technique of time-geography can capture everyday movements, the stories and event processes are structurally reduced to notated forms. While these notations are effective for capturing the general pattern of everyday use, many everyday tactics in the narrative specifics tend to be overlooked in this representational format. In order to understand the everyday cultural experience properly and more richly, I propose to supplement the narrative notations visually.

Visual Methodologies

Scholars who are interested in everyday social cultural issues, such as Mike Crang (2003), Joe Moran (2005) and Sarah Pink (2006), have argued that the most appropriate way to represent everyday life in a given place is to show its original sense perceptions, rather than to narrate it merely through various texts and diagrams, so that the representation can transmit something of the original experiences of the place more effectively. Among human perceptions, visual perception is widely privileged for its capacity to convey significant emotional impacts. As Crang argued, visualization can, with seeming effortlessness, bring the audiences back to the scene in an ontology that privileges the visible realities. In an epistemological sense, the visualization of data also provides visual metaphors to constitute the truth claims (2003: 494-504). Also, according to Moran, visual images do not emphasize the specific character of everyday life but represent many scenes that seem meaningless and are often overlooked, so that we can understand the monotonous stories of everyday life further. In terms of everyday life observation, unlike written narrative forms, the information in a visual image is not limited to any

specific meaning but can be endlessly reexamined (2005: 24-25). Therefore, as Pink has indicated, in terms of ethnographic studies, visual materials have better ability than interview documents alone to capture the complexity of everyday life. Such materials are also easier, she argues, to use for comparison (2003: 182-185). Through her recent works and some other examples, in the following exploration we shall see how visual materials were used for representing cultural experience as well as for grasping the interrelationship between everyday life and the place.

Approaches: comparative analysis of visual materials

For Pink, the most important approach to understanding a place is to experience, to participate in, the life of the people that makes the space a culturally meaningful place. Her recent works such as *Walking with Video* (2007) and *An Urban Tour* (2008) serve as examples. The methodology that she exemplified in these texts was to walk (also to eat, drink, talk and so on) with people, to take part in the everyday place-making process and to make a video recording alongside. The target of the exploration was to comprehend people's roles in the place-making; in other words, to understand the significance of everyday social practice to the making of the sense of a place. Video worked as a means of grasping the experience of sounds and movements so as to deliver the experience to someone else. It is a technique that allows a return of the everyday experience with a sense of perception and an understanding of other people's experience in place making, to allow both reexamination and comparison of reflexive analysis.

In terms of the study of time-geography, the stories of a specific time (a particular hour in a day or a particular date in a year) in a specific place can productively be explained by photographs. Anyone who has watched the film *Smoke* (1995) must have been impressed by Auggie Wren's photograph collection (Figure 5.12). The film concerns the character Auggie Wren who had been taking a photograph at the same time from the same spot every day for eleven years. Wren's photographs thus

encapsulated one sustained view of the everyday life of a particular street corner in relation to a specified space-time. Tom Phillips's art project of '20 Sites n years' serves as another example. The project commenced in 1973 and is ongoing. In this project, Phillips aims to take photographs of twenty sites in south London in May and June every year, and image is taken on the same date of the year from the same position and angle. These photographs thus show the changes in landscape and everyday life throughout the last four decades in the twenty locations, and have, as a collection, come to serve as very good materials for comparative analysis. The materials collected through such an approach can certainly be useful for exploring the relationship between everyday life style and tissue typology or the changes of environmental context. Although such an approach is beyond the scope and timeframe of a PhD study, these projects have inspired my visual approach to the study of a 24-hour time-geography in Tainan. Such a series of visual materials can help us to compare the ways of appropriation in different locations or the stories at different hours of a day in a single location.



Figure 5.12 Auggie Wren's photo collection (snapshot captured from the film 'Smoke')

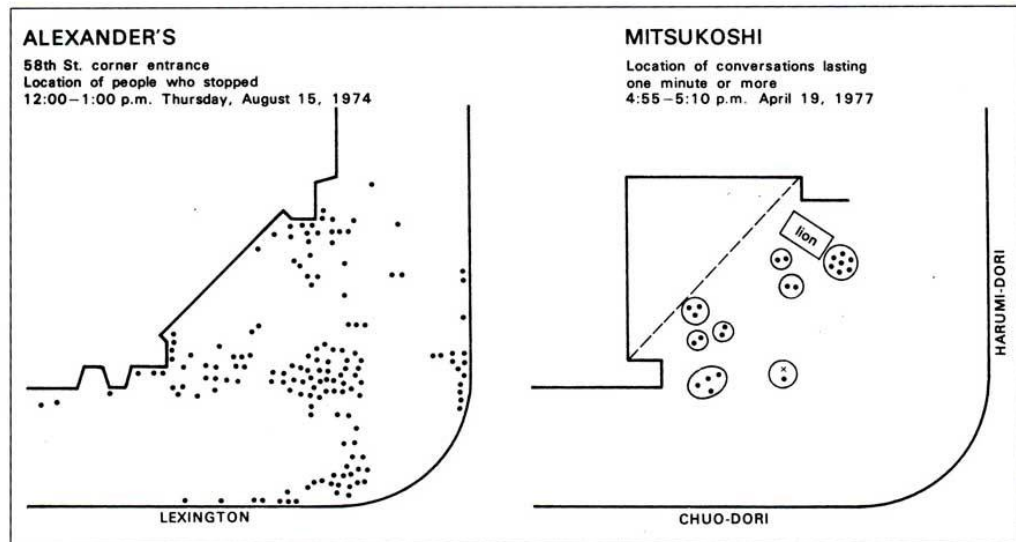


Figure 5.13 Comparative study of spatial appropriation patterns of the department store doorways of New York (*left*) and Tokyo (*right*) (Whyte 2000: 231)

A similar, albeit more social scientific, study can be found in the work of the urbanist William H. Whyte (2000), in particular his comparative study of everyday life in New York and in Tokyo. Whyte not only described the everyday life stories through photos, but also analysed the stories through a diagram of population distribution in spaces (Figure 5.13) and a diagram of population density in time (Figure 5.14). In Figure 5.13, the diagram illustrates activity in department-store doorways where people stop moving, whether alone or with others, waiting or chatting and so on. As can be seen, people in New York tend to stop in the area where building lines intersect; people in Tokyo prefer the area near the entrance. Then Figure 5.14 reveals the changes of population density, including the total amount of population and the amounts of particular categories of people, in streets during a day for comparative discussions. These diagrams can quantify everyday life stories as statistical data and are thus useful for scientific analysis.

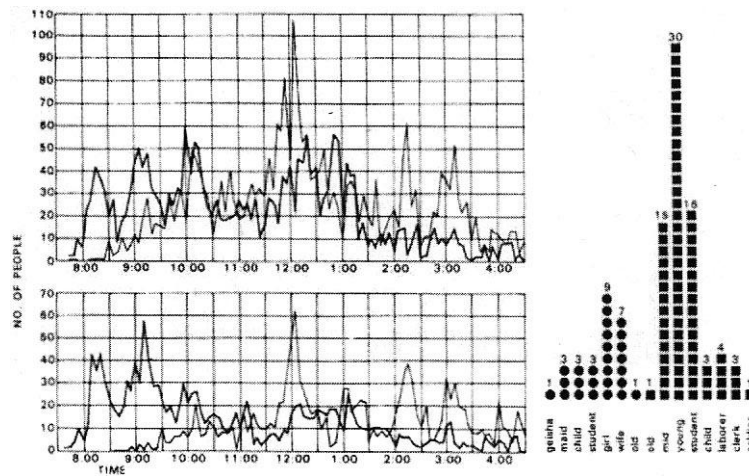
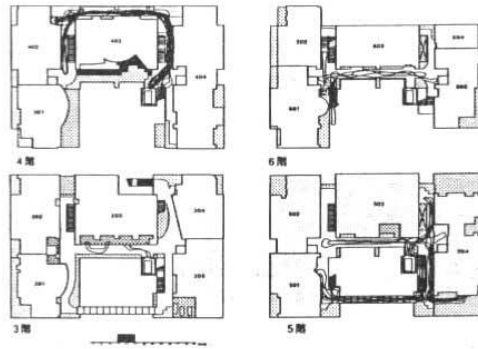


Figure 5.14 Comparative study of street population fluxation of a day (Whyte 2000: 235)

In the visualization of everyday life, however, as the cultural geographer Gillian Rose argued, the quantity is not always the only criteria of significance (2001: 66). We should pay more attention to the stories rather than the quantities, she suggests. Whyte also described everyday stories through his motion picture footage. For example, in his well-known film *The Social Life of Small Urban Spaces* (1988), he noticed that the pedestrian speeds both in New York and in Tokyo were very fast as both cities are very busy; yet the overall speed in Tokyo was probably faster because many people break into a run when they are in a hurry (2000: 233). He was also aware that the walking experience of Tokyo was more interesting than New York's, because of the disorder of activities and the greater mixture of shops in Tokyo's streets (2000: 243). It is clear that stories like these can be used for the study of time-geography when considering their relationships with 24-hour space-time. In order to capture such dynamic stories visually and deliver the experience properly, we must use videos, as Pink suggested, rather than individual photos.



Everyday movements in NEXT21 (weekday 10:00-12:00)

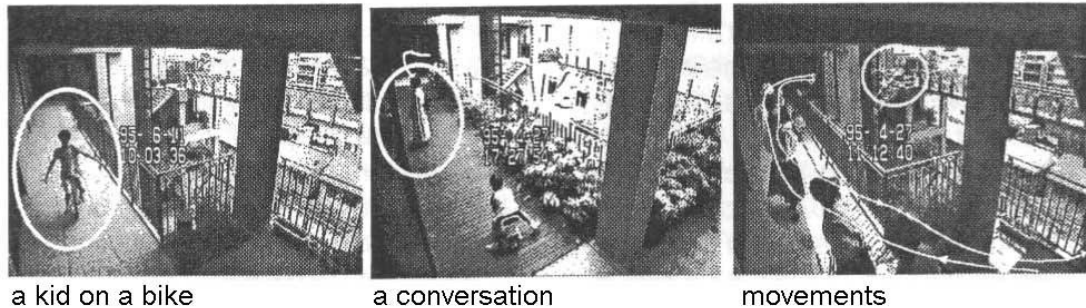


Figure 5.15 Everyday life observation in NEXT21 (Takada 1996)

Video methodology was also used by the architectural theorist Mitsuo Takada (1996) for his project on everyday life observation in the NEXT21 residential complex. NEXT21 is an experimental urban housing project of Osaka Gas built in 1993 with specially designed shape, circulation, equipment and energy system with the aims of being both environment-friendly and energy-efficient. Due to its innovative housing concept, there have been various research studies which have been concerned with the design of this project. In Takada's study, he used a number of fixed video recorders around the spaces of the building to film everyday movements. As Figure 5.15 shows, his technique of using video photographs together with maps (building plans) can help to explain the events in time and space properly and thus through these we can grasp the everyday narratives in detail. In this project, Takada is concerned with some major categories of everyday activities such as 'going out for work/school', 'going out for shopping', 'conversation and strolling', 'children playing', and when, where and how in the observed space these activities normally happened. This technique appears to be

very useful for the study of everyday spatial practice in a tissue typology and thus will be considered in my methodology.

Cinematic representation: a strip of sequential images¹¹

Video appears to be the most successful visual form by which to depict the dynamic structure of a place, and thus is often a tool for everyday life studies, such as those by Pink and Takada. In order to work with the concept of time-geography, however, the videos should be organized methodically in a framework based on 24-hour time. Developing Auggie Wren's and Phillips's techniques, I propose to make a short video every hour from the same spot for a day. Such a study will need a proper index system for exploration. This thesis thus suggests using a strip representation with 24-hour sequential images based on the cinematic principle of reproducing the real movements: 'immobile sections + abstract time' – the immobile sections are not merely photos, but equidistant snapshots, and the equidistance is transferred on to a framework as the mechanism to constitute a film (Deleuze 1986: 4-5). A strip of sequential motion images can virtually also reproduce dynamic context, and the static form of representation can more easily be compared, discussed and annotated for analysis. More importantly, it can work with the concept of 24-hour time-geography and in this case, as an index system, the representation will allow the dynamic stories to be calibrated in space-time. Then according to what we have, we can readily decide which pieces of the film are in need of further exploration. Such a representation can work not only as an index system for video explorations, but also itself as a means of understanding the context. This index system is thus much better than a system that only files the videos in time, for example 'taken at 8:00-8:05am', since we can actually see the summary of the story in the video through the representation of sequential snapshots.

¹¹ I have also elaborated this approach elsewhere in Liu (2008).

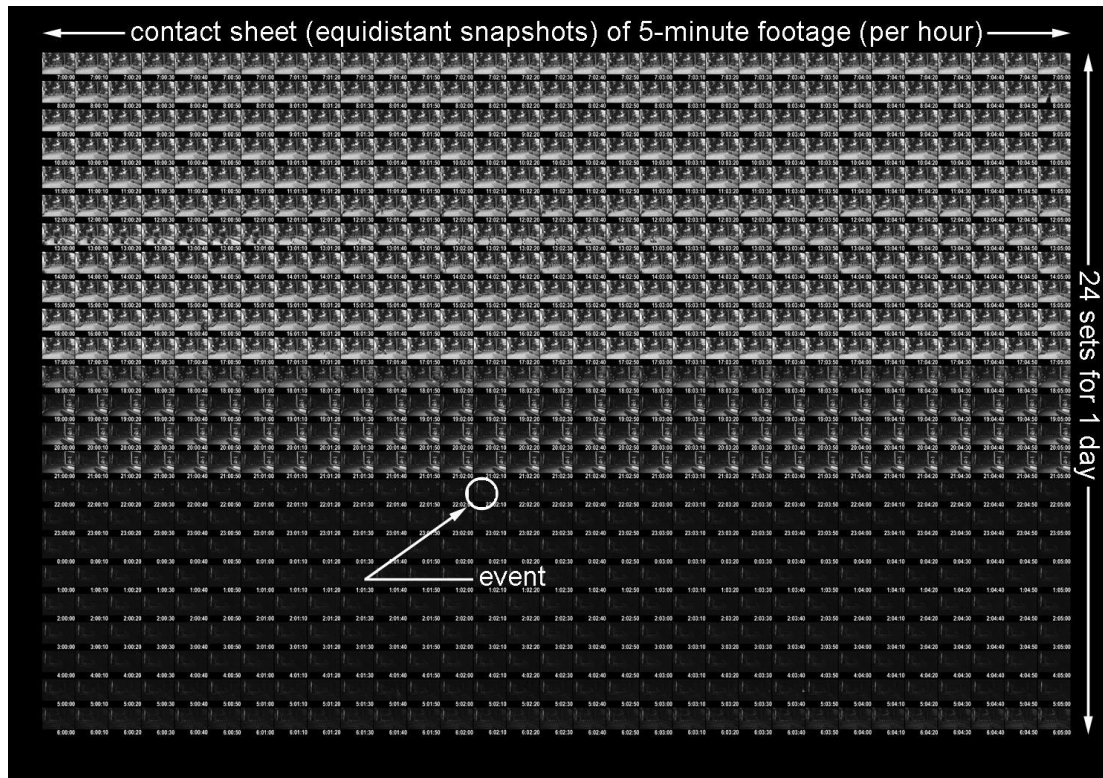


Figure 5.16 Representation of one day in the life of the temple courtyard



Figure 5.17 Sequential snapshots

Basically, the case-study empirical observation is concerned with one ordinary day in the life of the temple courtyard. In order to allow the representation to have a relatively objective form, the images in a strip are equidistant in time and are not intended to be structured by the narrative itself. Such an approach might focus upon dramatic or striking moments in the day. In conjunction with the concept

of time-geography, the everyday life event sequences can be depicted in the framework shown in Figure 5.16. In this diagram, the depicting form is represented as a contact sheet of the original 24 sets (one set per hour for a day) of five-minute footage. As Rose suggested, any sample for a visual study of this kind must be large enough to include most extreme cases but not too large to be managed (2001: 59). I have proposed a duration of five minutes as the most appropriate length for my exploration because it is long enough to capture various kinds of event and the exploration of 24 sets of five-minute videos in each case appears to be manageable. In addition, these videos must be taken at the same minute of each hour to ensure the equidistance (from hour to hour), and taken from the same position with the same angle to allow coherence and comparability of the visual materials. Accordingly, in each observed case-study temple courtyard space, I took a five-minute film each hour from the same spot, and repeated it 24 times for a day (7.00-7.05am; 8.00-8.05am ... until 6:00-6:05am the next day). Then in the representation, each set of the five-minute footage is divided by an interval of 10 seconds to get 31 equidistant sequential snapshots represented as a contact sheet (Figure 5.17). Ten seconds was the average time for people walking through the video frame (a distance of 15-25 metres). The interval thus cannot be longer, so that most of the activities can be captured in the representation; it is also not advisable that it should be shorter, or we would have too many snapshots. Then, 24 sets of them constitute a well-structured temporal framework of one day for everyday life exploration. The concept of this diagram thus transforms the typical three dimensional tracing idea of time-geography into a two dimensional filmic narrative framework. This not only serves as an index for video exploration but also allows a representation of one day in the life in relation to the space-time context. The everyday life representations that I will discuss in Chapter 8 can be found in Figures F, G and H (pp.246-254).

Photographic Conditions and Limitations

All field-based studies are time-intensive and this has been one of the limitations of my own work in Tainan. In these circumstances, I only took videos for one day – 24 sets of five-minute footage – as samples of each case. According to Bent Flyvbjerg (2006), such a case-study based qualitative research does not require a large number of samples; instead, the samples must be non-specific and have no classes or conflicts so that they can be fairly convincing (2006: 225-228). In other words, it is acceptable to have only one day's worth of observation for each case, as long as the date for the observations is well chosen and in similar conditions to ensure the comparability and persuasiveness of the captured everyday life stories. Thus, the dates of the observations in the case-study temple courtyards must be weekdays in similar weather without special activities, such as festivals. The observations in Yonghua, Zonggan and Haian Temple courtyards were carried out, respectively, on Tuesday 6 March 2007, Tuesday 6 November 2007 and Wednesday 7 November 2007. With good weather and no special events, the everyday life in the temple courtyard spaces on these dates appeared to be fairly typical and ordinary. With respect to the issue of photographic framing, I took fixed panoramic views without focusing on specific objects so as to deliver whole scenes in an appropriate condition for examination.

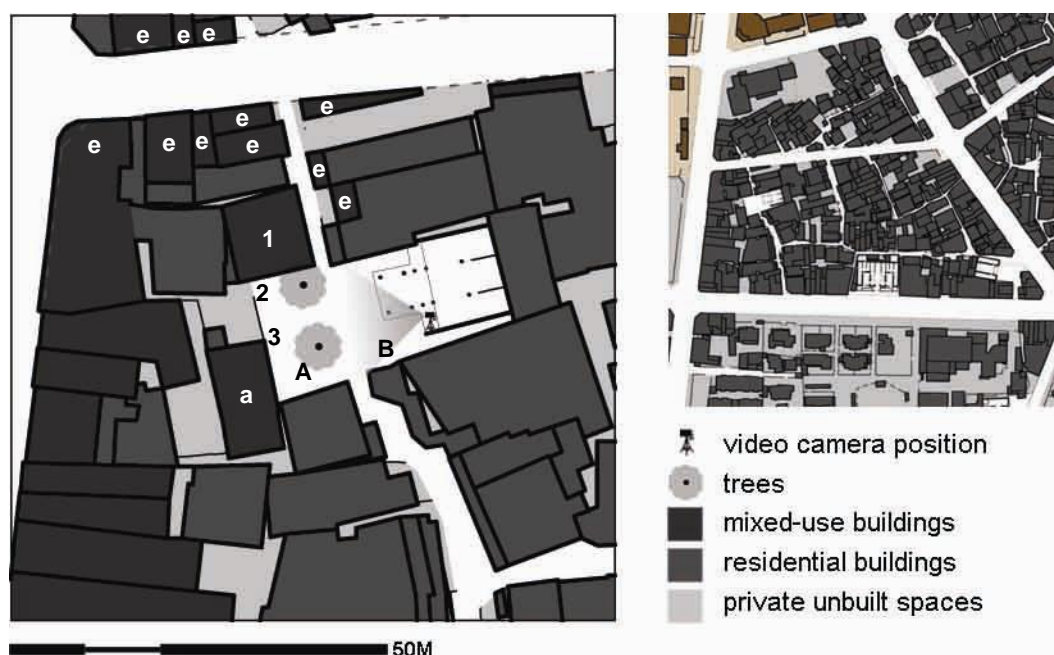
According to Rose (2001), the visual methodology used for my study can be understood as a 'content analysis'. This method often defines a very rigorous operational procedure, and the result of its analysis is very accurate, reliable and objective. It is often practised with both quantitative and qualitative considerations and can be operated repeatedly. Because the analysis does not rely on the quantitative data, this method can further represent the original cultural meaning. Because it is repeatable and highly efficient in operation, Rose called it a scientific social research methodology. The only drawback of this method is that the analysis merely relies on the visual materials, and does not give very much consideration to the social meanings derived from the sites of image production and receiving (Rose 2001: 54-68). Since the case-study locations were far from my study base, it was

difficult for me to go deeply into the local social life for further exploring the cultural meanings of the images.

Practice of Empirical Observation

In operational terms, the courtyard spaces in front of the Yonghua, Zonggan and Haian Temples were the sites of observation. In terms of the temple courtyard block typology of Tainan, the courtyard space is often the social core of everyday life in the block because, in the interior of a block, the temple courtyard allows public events to happen in the relatively private everyday spaces. As a consequence these spaces often serve as the hub of collective neighbourhood social life. In addition, as most of the movements in the alleys inside a block also pass through this hub space, to observe the appropriation of the courtyard can also help us to grasp the condition of flow network inside the block.

It is necessary to understand the functional distribution, especially of the residential and mixed-use lands, surrounding the temple courtyards (surveyed in 2007-2008), as well as the video camera positions in relation to the space. According to Tainan's municipal zoning system, all the land in the three case-study blocks is designated for commercial purpose but, in practice, most of the land inside the blocks is not used commercially. To have a general idea about the practical condition of land use surrounding the case-study temple courtyards is important because it often influences the everyday stories which occur in the courtyards. This will also help to built up the connection between the morphological background and the everyday life observation of the space.



A-B: motorbike parking areas a: artist's studio e: eating places (restaurants, bars, cafés etc.)

1: Green House (2F) and antique shop (GF) 2: staircase for Green House 3: joss paper burner

Figure 5.18 Yonghua Temple courtyard and the surrounding land use



1: Green House (2F) and antique shop (GF) 2: staircase for Green House 3: joss paper burner

4: incense burner 5: introduction board to Yonghua Temple

Figure 5.19 A shot of Yonghua Temple courtyard from the video camera position shown in Figure 5.18

Everyday living condition and observation of the Yonghua Temple courtyard

Like most urban blocks in central Tainan, the perimeter of the Yonghua Temple block is mainly occupied by mixed-use buildings, while the interior of the block is relatively residential. This block is located near Confucius Temple, one of the most popular tourist attractions in Tainan. In addition, as can be seen in Figure 5.18, there are some eating places (restaurants, bars, cafes and so on) on the north side street of the block and, as an extension of these commercial activities, there are also some eating places on the alley that connects the north side of the Yonghua Temple courtyard with the north side street of the block. Thus, the everyday appropriation of the Yonghua Temple courtyard conceivably includes not only local neighbourhood daily social practice, but also some public events activated by the visitors to both Confucius Temple and the eating places.

In morphological terms, the temple courtyard was developed in relationship to an existing alley (as we shall see in Chapter 7). As the alley is three to six metres in width, the courtyard is accessible by cars. In this case, the social practice in this courtyard space also includes vehicular traffic. In order to capture all kinds of everyday life practice in this space, a video camera with a wide-angle lens was positioned at one corner of Yonghua Temple, as Figure 5.18 shows, so that the entire courtyard space could be framed in the shot. In Figure 5.19, describing a sample shot, we can see that there are benches in the temple's doorway, an incense burner (4) in the centre outside the doorway, and a board (5) on the right-hand side wall that serves as an introduction to the temple. The ground floor of the building on the far right corner is occupied by an antique shop (1), whose owner lives on the first floor. The main entrance of the shop is located on the side alley. The second floor of the same building is occupied by the Green House, an American-style restaurant, and its entrance can only be reached by means of an outdoor staircase (2) separate from the building in the corner of the courtyard, as shown in both Figures 5.18 and 5.19. The single-storey house on the far left corner is an artist's studio (a), and the area outside this studio with some motorbikes parked refers to area A in both Figures 5.18 and

5.19. Another area with motorbikes parked against the left-hand side wall in Figure 5.19 refers to area B. We can also find a row of white plastic chairs placed between two trees in the sample shot. They are not simply for sitting. According to the temple administrator, they are placed there to prevent motorbikes being parked against the opposite wall of the temple for the convenience of visitors using the joss paper burner (3) located against that wall.

The observation of this temple courtyard, and the various daily appropriations of it, was carried out from 7am on Tuesday 6 March 2007 to 6am the next day. During that period 24 sets of five-minute footage were taken. They are represented as equidistant sequential snapshots in Figure F1 (p.246). Because in Figure F1 (p.246) it is difficult to see the stories in the images, images that are considered important to the story are displayed at a larger size along with a written description in the Appendix. Figure F2 (p.247) serves as the reference sheet. Each observable human act in Figure F1 (p.246) is denoted by a grey dot in Figure F2 (p.247), so as to help in grasping event occurrences. The numeric coding system helps us to understand the corresponding positions in Figure F1 (p.246) of the images used in the Appendix and in Chapter 8. Figure F3 (p.248) shows the event-time map. Based on these diagrams, the study of one day in the life of the Yonghua Temple courtyard will be examined through the framework founded on the concept of time-geography together with the everyday life narratives in the videos.

Everyday living condition and observation of the Zonggan Temple courtyard

The perimeter of the Zonggan Temple block is also primarily occupied by mixed-use buildings, while its centre is relatively residential. Zhongzheng Road, the street on the north side of the block, as we shall see in Chapter 7, was the most bustling axis in Tainan during the Japanese Colonial Period. With a variety of fashion shops, restaurants, bars and banks, it is still populous today. In Figure D (Chapter 7, p.219), we can see that Youai Market, a traditional indoor market, is on the south side street of the

block. These commercial activities, on both the north and south sides of the block, follow the alleys and extend into the centre of the block. More importantly, as can be found in Figure 5.20, the types of the commercial activities on the alleys inside the block continue what they are on the perimeter of the block. The shops on the alleys closer to the north side of the block are mainly for fashions, but the shops on the alleys closer to the south side of the block are for greengrocers and butchers. Around the temple courtyard in the centre of the block, as Figure 5.20 shows, there are two temples (1 and 2), a Japanese seafood bar (5) (open daily from 6pm to midnight), a grocery store (3), a domestic liquefied petroleum gas (LPG) supplier (4), and a carton box factory (6). The seafood bar is very popular and it places outdoor tables over almost all of the courtyard space every evening. Thus, the daily appropriation of this courtyard space appears to be a lot more public than that of the other two temple courtyard spaces that I will examine.

Located in the centre of a block, this temple courtyard can be accessed by alleys that connect this space and the streets on all sides of the block. So the circulation of movements within the space is diverse. For the observation, as Figure 5.20 shows, a video camera with a wide-angle lens was positioned in the southwest corner of the courtyard next to a barber's shop. A sample shot is shown in Figure 5.21. In this image, Zonggan Temple (1) is in the far right corner. Along the right side edge, the area with motorbikes parked close to the camera refers to area A in both Figures 5.20 and 5.21, and the space behind the rubbish bin in the shot belongs to the seafood bar. The grocery store (3) and the LPG supplier (4) are next to Zonggan Temple. The LPG supplier is almost hidden by the grocery store from the camera's view. Also in the image we can see an alley entrance which is situated between the LPG supplier (4) and Wuwen Temple (2).

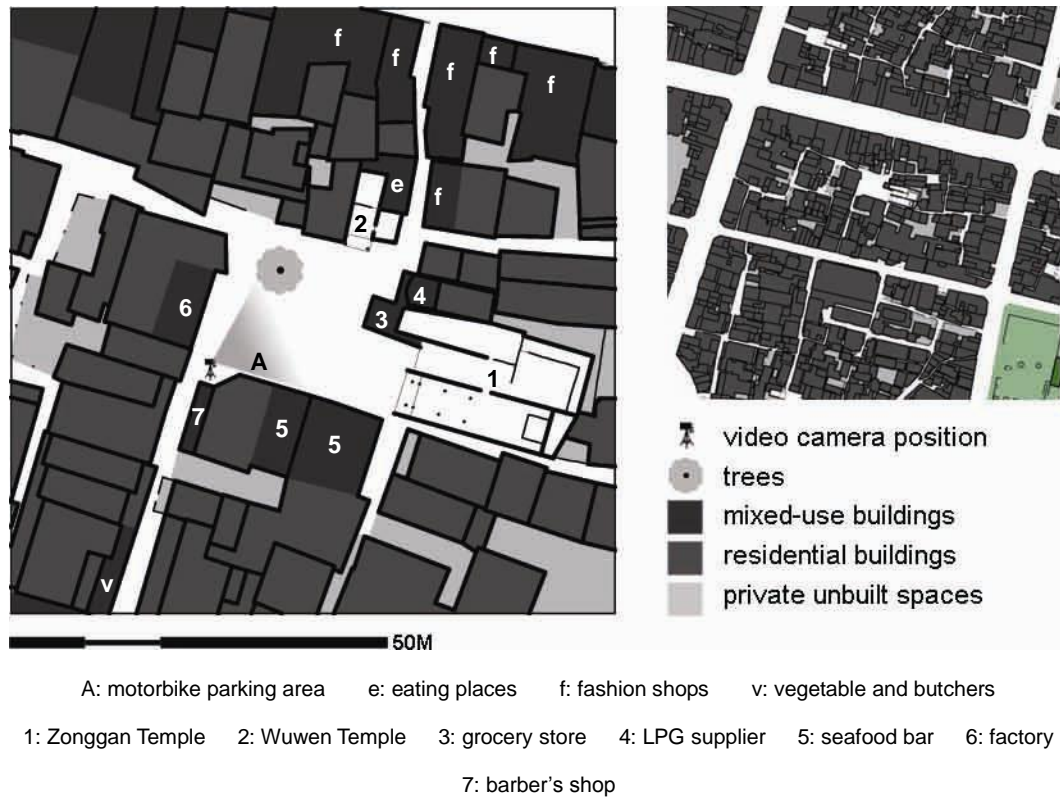


Figure 5.20 Zonggan Temple courtyard and the surrounding land use



Figure 5.21 A shot of Zonggan Temple courtyard from the video camera position shown in Figure 5.20

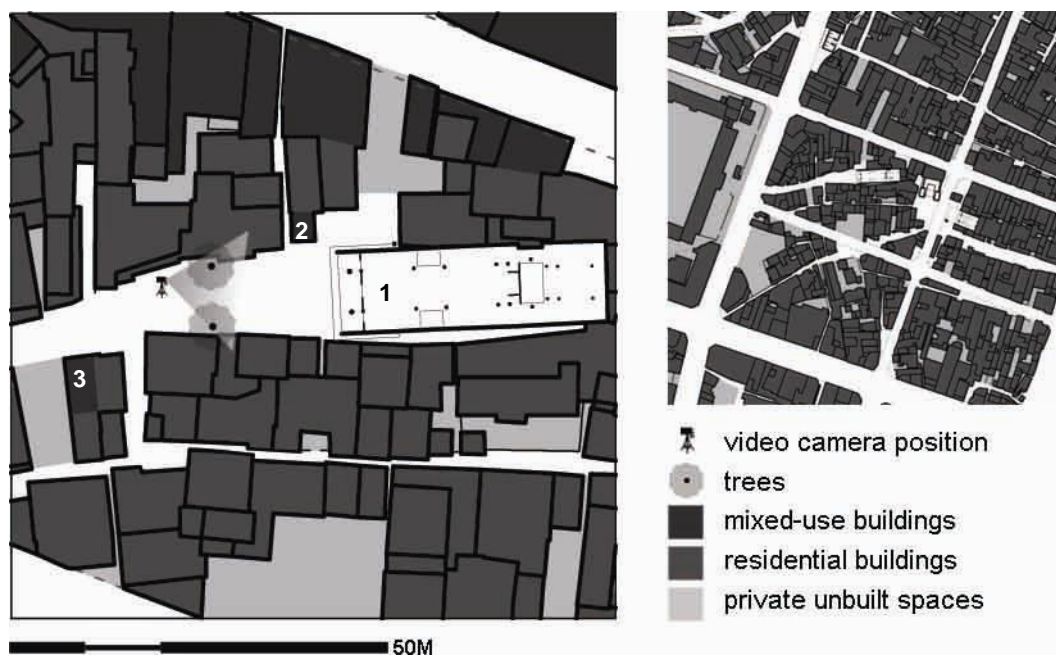
The observation of this temple courtyard's daily appropriation was carried out from 7am on Tuesday 6 November 2007 to 6am the next day, and during that period 24 sets of five-minute footage were taken. They are represented as equidistant sequential snapshots in Figure G1 (p.249). Figure G2 (p.250) serves as the reference sheet and Figure G3 (p.251) shows the event-time map. Based on these diagrams, the study of one day in the life of the Zonggan Temple courtyard will be examined through the framework founded on the concept of time-geography together with the everyday life narratives in the videos.

Everyday living condition and observation of the Haian Temple courtyard

The streets on the east and south sides of the Haian Temple block were developed during the period 1980-1995. However, the commercial activities do not spread along these newly developed streets, but on the perimeter of the area formed by four blocks including the Haian Temple block and the nearby blocks on the East, the Southeast and the South (the larger block before the subdivision happened in 1980-1995, see Chapter 7). So, as Figure 5.22 shows, the mixed-use properties are mainly on the north and west sides of the Haian Temple block. In addition, the pattern of the commercial activities in these mixed-use properties is different from that of the other two case-study blocks. In this area, there is no tourist attraction like the Confucius Temple, no main street like Zhongzheng Road and no traditional market. Rather, the key function of this space is a primary school, located to the west of the Haian Temple block. Otherwise it is a conventional neighbourhood in inner-city Tainan. Thus the commercial activities in the mixed-use properties around this area principally act as amenities for the everyday life of local residents, such as small local cafés, groceries, convenience stores, stamp shops, motorbike maintenance services. There are no facilities such as fashion shops, large markets, restaurants or bars that can attract people from outside of the immediate neighbourhood. So the life-style in this block is relatively conventional and simple.

Morphologically, influenced by the ancient canal fabric (see Chapter 7), the Haian Temple courtyard appears to be located at the end of a cul-de-sac in the centre of a block. Unlike the temple courtyards in the other two case-study urban blocks, here the surrounding buildings only define three sides of this courtyard space, while the remaining side is loosely marked by two trees. The surrounding buildings of this courtyard are mainly residential. In Figure 5.22, the small mixed-use property (2) on the north side of the courtyard near Haian Temple (1) is the office of the Haian Temple Management Committee, and is also a place for local neighbourhood meetings. There is an alley on one side of this office building that leads to the street on the north side of the block, and also an alley on the south side of Haian Temple that leads to the courtyard of another temple on the east side of the block. Both of these alleys are very narrow (about 0.7-2 metres) and cannot be accessed by cars. This, along with the generally contrived nature of the courtyard, means that the cars coming into the courtyard must reverse to get out of the block (as can be seen in Figure 5.23). Yet the alleys can be accessed by motorbikes, so there is still some traffic passing through this space. In addition, except for the office, as Figure 5.22 shows, there is another mixed-use property (3) inside the block to the southwest of the video camera position. This is a stamp shop, the only commercial space inside this block. Due to its location and the nature of its business, it has no discernable influence on the appropriation of the courtyard space.

The observation of this temple courtyard's appropriation was carried out from 7am on Wednesday 7 November 2007 to 6am the next day, and during that period 24 sets of five-minute footage were taken. Figures H1, H2 and H3 (pp.252-254) were developed in the same manner by which the other two case-study diagrams were made. Based on these diagrams, the condition of one day in the life of Haian Temple courtyard will be examined.



1: Haian Temple 2: office of temple management committee 3: stamp shop

Figure 5.22 Haian Temple courtyard and the surrounding land use



Figure 5.23 A shot of Haian Temple courtyard from the video camera position shown in Figure 5.22

This methodological introduction has intended to outline the main research techniques and methods

that have underpinned this thesis. It has also intended to introduce something of the history of Tainan and to outline the key case study sites. The next two chapters will focus in greater detail on the temple courtyards and their morphology.

THE URBAN FORMATION OF TAINAN

Study of a map of today's Tainan (Figure B4, p.189) shows that the most distinct elements in it are probably the urban blocks that are characteristic of the central city area. Just like the Haussmannian blocks of Paris, the block morphology of Tainan produced since the Japanese Colonial Period has dominated its contemporary cityscape. Yet this obvious urban characteristic hides another, more subtle urban pattern. Hidden within many of these seemingly regular urban blocks, are complex labyrinthine alley patterns often opening onto intimate temple courtyards. This special morphological character, combining regular exterior and complex interior, has, as I shall argue in the discussion and conclusion chapters of this thesis, formed a unique heterotopic block typology. In order to appreciate the value of this urban fabric, it is very important to understand its morphological history. To this end, this chapter will start from the very beginning of this city's development so that we can get some sense of the long historical process by which today's urban fabric has been formed. As Chapter 5 proposed, the morphological changes of the city that I shall be exploring are summarized in the maps given as Figures A and B (located at the end of this chapter, pp.188-189).

This chapter will employ the typomorphological methodologies reviewed earlier to describe the processes that underlie the formation of the city of Tainan as it is today. Through such mapping techniques, particular lurking morphological characteristics and typological rules in the urban change of the city can be discerned. Thus, on the one hand, this exploration provides the foundation for the discussion of the relationship between the existing urban form and the contemporary everyday appropriation that will follow; on the other, it helps to identify the value of significant urban elements in the process of urban change so as to assist the decision-making in future urban planning, design and

conservation management.

As I have noted in Chapter 5, in terms of typomorphological study, the history of Tainan can be divided into three broad phases. They are the pre-modern period (1624-1895), the colonial modern period (1895-1945) and the postcolonial modern period (1945-2010). As we shall see in Section 6.1, the morphological study of pre-modern Tainan will emphasize Conzen's concept of plan units and the Italian typomorphological concept of matrix routes for understanding the character and logic in the ring-like growth process by which the city expanded, and the stories of city walls and axes, which were the most significant urban elements throughout that early phase.

Then the two modern phases will be explored together in Section 6.2. The exploration of Tainan's morphology in the second phase, the colonial modern period (1895-1945), will shift the emphasis from the concept of plan units and the process of urban expansion to the structural changes of the city centre – the area that sprouted in the pre-modern period – that were initiated by the colonial governors. This shift in emphasis will help us to understand some of the background of today's urban blocks in Tainan and engage with the Haussmann-like urban reforms that were implemented at that time. Finally, as most of the postcolonial developments in Tainan followed the Japanese planning system, the urban changes of this period had less influence on the morphology of the city centre's fabric. In this case, the exploration will only point out some of the most noticeable changes and briefly state the postcolonial governors' attitudes towards urban development.

6.1 URBAN MORPHOLOGY OF TAINAN BEFORE 1895

Tainan, the ancient capital of Taiwan, lies on the south-western seaboard of Taiwan. As Figure 6.1 shows, there are two important historic areas in Tainan: Anping (A) and the ancient city centre (B). Both of these areas have the richest morphological stratification in the city. This chapter will focus on the city centre area as this is the only area where the pre-modern and the Japanese modern block fabrics overlap each other. This area is also significant because it is where, as will be explained at the end of the thesis, a heterotopic block typology is formed. The urban fabric in the Anping area has been subject to less change historically and is by contrast relatively stable and traditional. With two significant ancient axes, the modernized city centre area has the densest historic urban fabric and architecture anywhere in Taiwan.

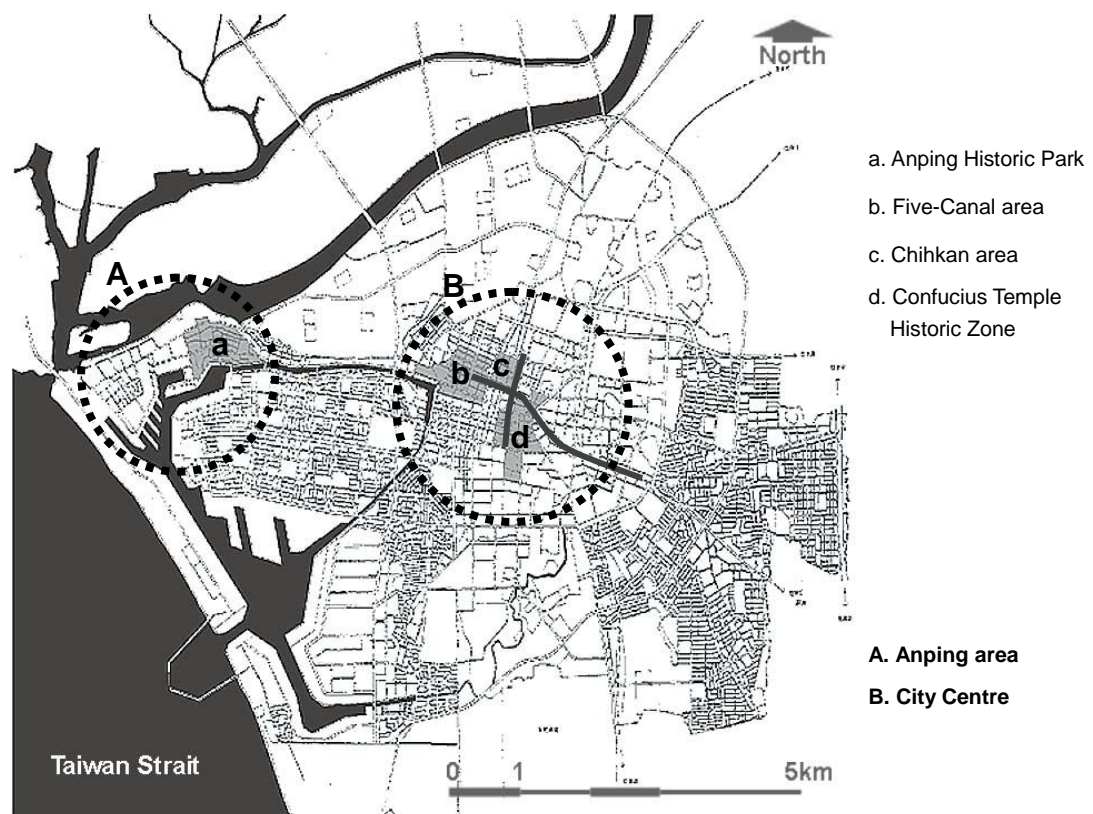


Figure 6.1 Main historic areas in Tainan

Before being colonized by Japan in 1895, Tainan was sequentially dominated by the Dutch (1624-1661), the Chinese under Koxinga (1661-1683) and the Chinese Qing Empire (1684-1895).

Taiwan was first named *Provintia* in the Dutch colonial period, was renamed *Chengtian Fu* (prefecture) by Koxinga and then became *Taiwan Fu* under Qing domination.¹ In 1887, the year the Province of Taiwan was founded for the whole island (it was part of Fujian Province) and the capital of Taiwan was switched to Taipei City, Taiwan Fu was renamed Tainan City. The morphology of this pre-modern Tainan will be explored sequentially in this section (6.1).

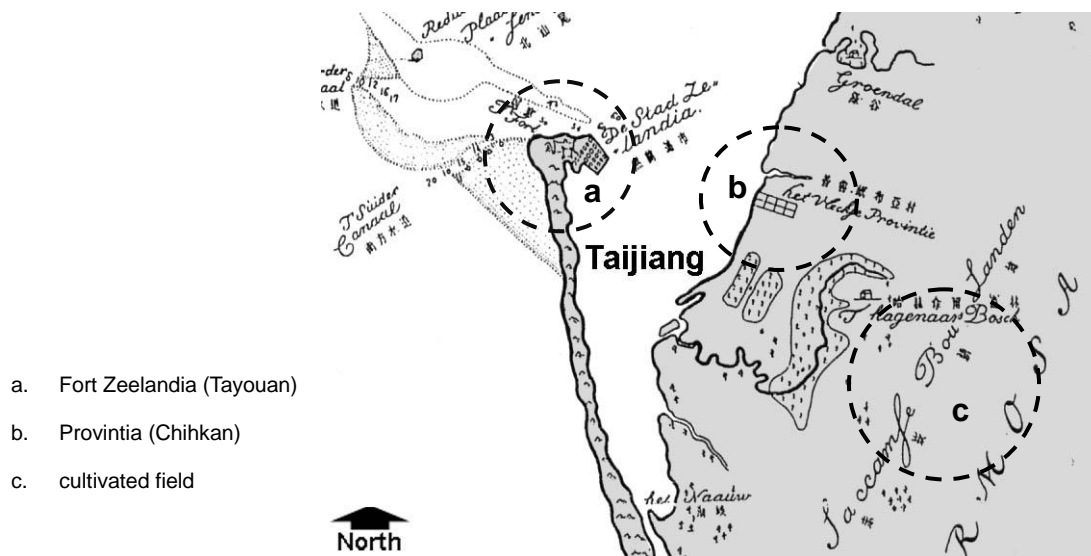


Figure 6.2 Provintia around the 1640s (edited from Figure 5.2, p.123)

Dutch Colonial Period (1624-1661)

Before the arrival of the Dutch, Tainan was populated by the Pinpu clan, an indigenous people, and Chinese migrants (Ke 1998: 20; Tsai 2007: 33; Wu 1997: 14). The Dutch East India Company occupied the area of present-day Anping (then called Tayouan) and built Fort Zeelandia there in 1624 (Figure 6.2). Then they developed a colonial city in the area of the present-day city centre (then called Chihkan), on the opposite side of Taijiang, the lagoon, for their trading business (Chiang 1995: 19; Ke

¹ The toponym Taiwan was derived from Tayouan. Tayouan was from the Pinpu indigenous language, originally implied the Anping area of Tainan and was also often used to refer to the whole Tainan area. The Qing government named this place (Tainan) Taiwan according to the Mandarin translation of Tayouan.

1998: 21). The colonials named this city *Provincia*, and the majority of its residents were the Dutch, the existing Chinese migrants, and traders from China and Japan.

Grid system

At that time, the Dutch planned *Provincia* with a gridded street system just as they did in many of their other colonies, such as Batavia, Cape Town and Colombo. As can be seen in Figure 6.2, the grid pattern was clearly drawn in this colonial map. In this grid, the most important axis was *Provincia Street*. As can be seen in Figure A1 (p.188), this street ran eastwards from the waterfront for around 300 metres and was crossed by three secondary streets. The main living area is shaded in grey in this diagram (Figure A1, p.188).

According to the colonial map in Figure 6.2, there was a cultivated field around 2.5 kilometres to the southeast of *Provincia Street*.² In order to transport crops for trading, there was a country path connecting this cultivated field and the main street. This path never appeared on any ancient maps but is important to the formative process of Tainan because, as Ke noted, all the subsequent eastward extensions of this axis in later periods tended to follow this path (1998: 24). In this case, the location of this path can be inferred from the subsequent development of this main street and is drawn in Figure A1 (p.188).

Establishing the concept of centre

Due to internal conflicts in China, many mainland Chinese moved to *Provincia* in the mid 17th century.³ By 1648, *Provincia Street* was lined by 175 residences, many warehouses and a hospital (Chung 2006: 2.4; Ke 1998: 25). The Dutch levied exorbitant taxes during their rule and this

² Also shown in the *Provincia* map drawn by Cornelis Jansz Ploekhoy in 1652; collected in Chiang (1997: 59).

³ In 1644, Manchu forces conquered Beijing, the capital of the Ming Dynasty, and established the Qing Dynasty. Scattered Ming remnants, including Koxinga, continued to resist Qing Empire forces in southern China for decades.

frequently caused resentment amongst the settlement's residents. A serious rebellion was raised against the Dutch regime in 1652, and once it had been quelled, the Dutch colonial settlers built Fort Provintia to resist further rebellions.⁴ The Fort was located to the north of the main residential area (Figure A1, p.188). Fort Provintia became the site of the central administrative and military authority of the city, and has persisted since that time as an iconic element of Tainan's cityscape.

By 1662, the final year of the Dutch colony, the south and the north of Provintia Street still remained relatively undeveloped (Ke 1998: 29-30). Although the main developed area (the area shaded in gray in Figure A1, p.188) was small in this period, it was the centre of the growth-ring in the following urban expansions in which the primary street of the grid had laid a significant foundation for the subsequent axial development.

The Period of Koxinga (1661-1683)

In the mid 17th century, the Chinese Ming Dynasty was overthrown and replaced by the Qing. The troops of Koxinga (Cheng-Gong Zheng), a loyal Ming general, attacked Provintia in 1661 and the Dutch surrendered in the following year. Under Koxinga's rule, Provintia City, Fort Provintia and Provintia Street were renamed, respectively, Chengtian Fu (prefecture), Chihkan Tower and Chihkan Street (also known as Main Street). At the same time, the area around Fort Zeelandia (Tayouan) became Anping Town. After Koxinga died in 1662, his son Jing Zheng inherited his role as governor of Taiwan (Tsai 2007).

⁴ The Huai-I Kuo Rebellion (1652), in which nearly 10,000 Chinese including around 5000 innocent women and children were killed by the Dutch (Tsai 2007: 38).

According to Ying Yang (1958 [1683]), a minister of Koxinga, when the troops of Koxinga landed on Taiwan, they found that almost all the buildings on Chihkan Street were built of bamboo and thatch, and there were plenty of warehouses for stocking crops. In addition, although there were some secondary streets, buildings were largely gathered on Chihkan Street. This description reflected the cityscape of Tainan in the Dutch colonial period. It appears that there were very few brick-built structures. Also, clearly Provintia was a trading-led city, as a normal city would not have so many warehouses on its main street. At that time, the arrangements of residential neighbourhoods was carefully controlled within a specific zone, which was abnormal when compared to Tainan in the later periods. The cartographic and textual evidence suggests that this colonial city was principally planned to serve as a trading post for the Dutch rather than a well-balanced urbanism for the local residents. Although Chengtian Fu's development in Koxinga's period was founded on the existing morphology developed by the Dutch, its character was very different from what it had been in the previous period as the Zheng family aimed to build a stable society in this city.

Influence of topography

During Koxinga's period, Main Street was extended eastward for another 300 metres due to the increase of population in the city (Ke 1998: 35). In contrast with the Dutch grid system, this extension was not restricted by any planned system but developed more naturally along an existing country path (the one connecting the cultivated field and Provintia Street shown in Figure A1, p.188). As Figure 6.3 illustrates, the main street developed by the Dutch followed a rigid east-west axis, while its eastward extension, developed in the Koxinga period, followed the topographical terrain more sensitively (Hung 1978: 15; Ke 1998: 53-54). This influence was still effective on the subsequent further eastward extensions of Main Street in the Qing period.

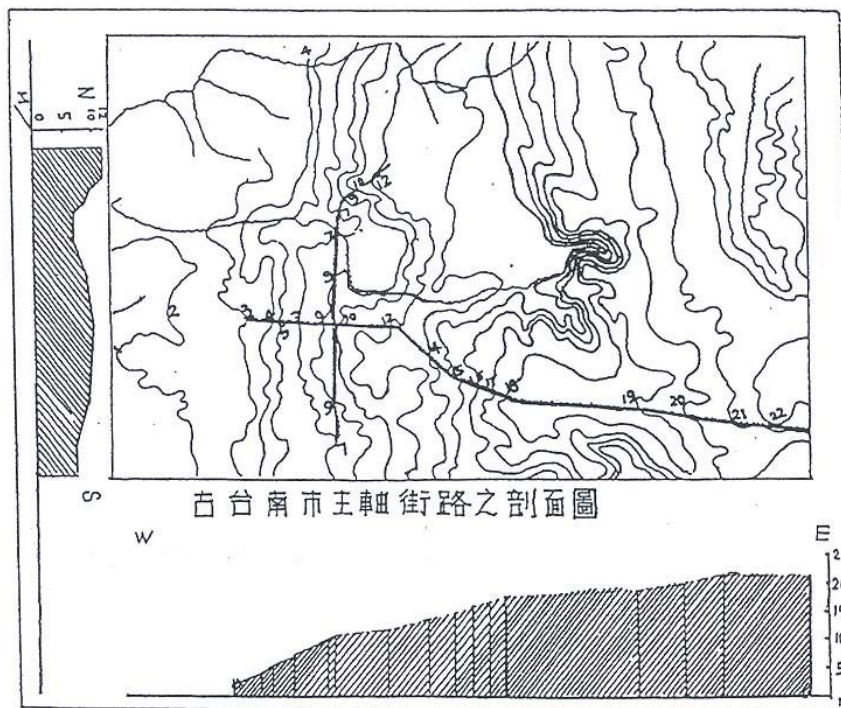


Figure 6.3 Topography and sections of the axes (Hung 1979: 17)

Cross-axes

By 1683, the end of Koxinga's rule, a north-south axis crossing the existing east-west axis was formed. In Figure A2 (p.188), this new axis and the areas that developed around it in this period are represented by a lighter shade. This diagram shows that the developments in this period were mainly distributed along these axes, especially towards the east and the north. Growth to the west came into contact with the coastline, which itself retreated as land was reclaimed for urban development.

Then Chengtian Fu (Tainan's name under Koxinga) was divided into four neighbourhoods for administrative purpose, and the cross-axes served as the arteries of each neighbourhood (Chung 2006: 2.6; Wu 1997: 20). This system strengthened the importance of the axes. We do not have a proper map that can explain the territories of these neighbourhoods in this period, but Figure 6.5 (p.168) can be of help; although this diagram represents the situation of neighbourhood territories in the Qing period, it helps us to imagine the initial condition of this division system. In addition, according to Kung-Chien

Kao, a governor of Taiwan in the early Qing period, the busiest areas of Chengtian Fu were situated along Main Street (1960 [1694]: 47).⁵ It appears that the east-west axis was more populous than the north-south axis.

Culture and education

As can be seen in Figure A2 (p.188), at that time there was a Confucius Temple and a farmers' market in the area around 300 metres to the south of the main developed areas. In fact, due to the increase of population and social demand, numerous markets, temples and schools were established in this period. There were 31 Chinese temples scattered over Chengtian Fu within the short duration of Koxinga's 23-year governance. As Ke has suggested, the emergence of these temples was a noticeable sign of the formation of a Chinese society (1998: 32). Also, the Chinese architectural style was used in the city, and the education system was also from China (Tsai 2007: 45). In contrast with the colonial society developed by the Dutch, a Chinese-style urbanism had been progressively rooted in Chengtian Fu. Because of the poor economic conditions at that time, however, the architectural styles in this city were conceivably much simpler than those in mainland China, and the temples were much cruder than they look today (Fu 1995: 83).

Since Tainan had only been occupied for sixty years before being ruled by the Qing Empire, in morphological terms, the urban developments in the Dutch and Koxinga periods were certainly not as influential as the developments in the Qing period. But these initial developments, including the axes and the concept of urban administrative and commercial centres, had undoubtedly laid a very important foundation for the subsequent urban growth.

⁵ See Kao (1960 [1694]): 鄭成功取台灣... 設四坊以居商賈。('Koxinga seized Taiwan ... arranged four neighbourhoods for merchants.');

大街，街界四坊，百貨聚集，故名。('It was named Main Street because, as the artery of the neighbourhoods, it had the busiest commercial activities.')

The Domination of the Qing Regime (1684-1895)

The urban developments which occurred in the Qing period had played a very crucial role in the formative process of Tainan before the Japanese colonial era. In today's Tainan, the historical elements and fabrics formed in this period are much more visible than those developed in the previous periods.

The Chinese Qing Empire forces attacked Taiwan in 1683 and annexed this island in the following year. Chengtian Fu was then renamed Taiwan Fu, subordinate to Fujian Province. In the initial stage of Qing domination, 1684-1720, the attitude of the Chinese governor toward this city's development was very passive because Taiwan was considered a remote frontier island for the central government of the Qing Empire located in Beijing (Hsiao 1990: 50). Thus, there was no purposive plan at the time and the city was developed freely.

Free sprawl in the early Qing period (1684-1720)

As Figure A3 (p.188) shows, Main Street had become two parallel streets by 1752. This change in fact happened before 1720. The width of Main Street in the late 17th century was around fifteen metres, and the owners of the Main Street shops thought that the street was too wide to run their businesses properly so some vendors set up stalls in the middle of the street. After a few years, these vendors had become fixed shops occupying the centre line of the street. As a result, Main Street was divided into two three-metre-wide parallel streets (Chan 2006: 126; Hsien 1962 [1807]: 9; Ke 1998: 38). This practice of occupying a public land for personal use was not allowed to happen openly in any of mainland China's large cities under Qing rule; nor in the Tainan of the Dutch and Koxinga periods. That it was tolerated in Tainan during this period clearly shows how passive the Qing governor was to Taiwan's urban development. In addition, Qing administrators did not employ the rigorous Chinese

cosmic concept to manage the urban form.⁶ Instead, they kept the existing system of the four-neighbourhood division and allowed the city to develop freely (Huang 1995: 33). Thanks to this lax governing attitude, the urban fabric of Taiwan Fu developed in a very disordered way and formed a unique morphology, as will be explored later in the subsection ‘labyrinthine alley fabric’.

In the meantime, Main Street kept extending eastward. The coastline retreated slightly westward again and subsequently more and more inhabitants settled in this coastal area. Although there was not much development toward the north and the south, the neighbourhoods grew rapidly and became thickened with more and more disordered alleys and buildings.⁷ Also, administrative centres such as the city hall and the county hall were established on the periphery of the densely developed areas. With these developments, the commercial activities in the central city, the oldest part of the city, flourished more and more. These changes are reflected in Figure A3 (p.188); but be aware that this map shows Tainan in 1752, so the main developed areas by 1720 were probably smaller and the city walls were not yet built at that time.⁸

Wooden city walls (1721-1787)

After the Yi-Kui Chu rebellion of 1721,⁹ the first serious indigenous uprising against the Qing Empire in Taiwan, the Qing Empire administrators abandoned its passive attitude to the planning of Taiwan Fu’s urban form, and built the city walls with seven gates in 1725 to defend the city. Although this development was mainly inspired by a military rationale, the walls were certainly influential on the subsequent urban development of Tainan. They not only provided the end points for the axes, but also

⁶ The Qing Empire’s Beijing Forbidden City is a perfect production under this cosmic concept; see Kevin Lynch (1981) for the conceptual details.

⁷ The administrative area of Tainan in 1720 was around 1.7 times the administrative area of Tainan in 1696 (Chung 2006: 2.18). The city was obviously developing very quickly at that time.

⁸ The first map of Tainan that can properly show street and building fabrics was made in 1752, as shown in Figure 5.4; although there are some drawings of Tainan’s fabric around 1720, they do not provide enough information for morphological studies.

⁹ The Yi-Kui Chu rebellion was the first serious uprising against the Qing Empire in Taiwan. At the time, Taiwan Fu was usurped for months (Wu 2007: 75).

defined the ground for urban sprawl. The concepts of inside, outside and orientations of the city were also clearly shaped.

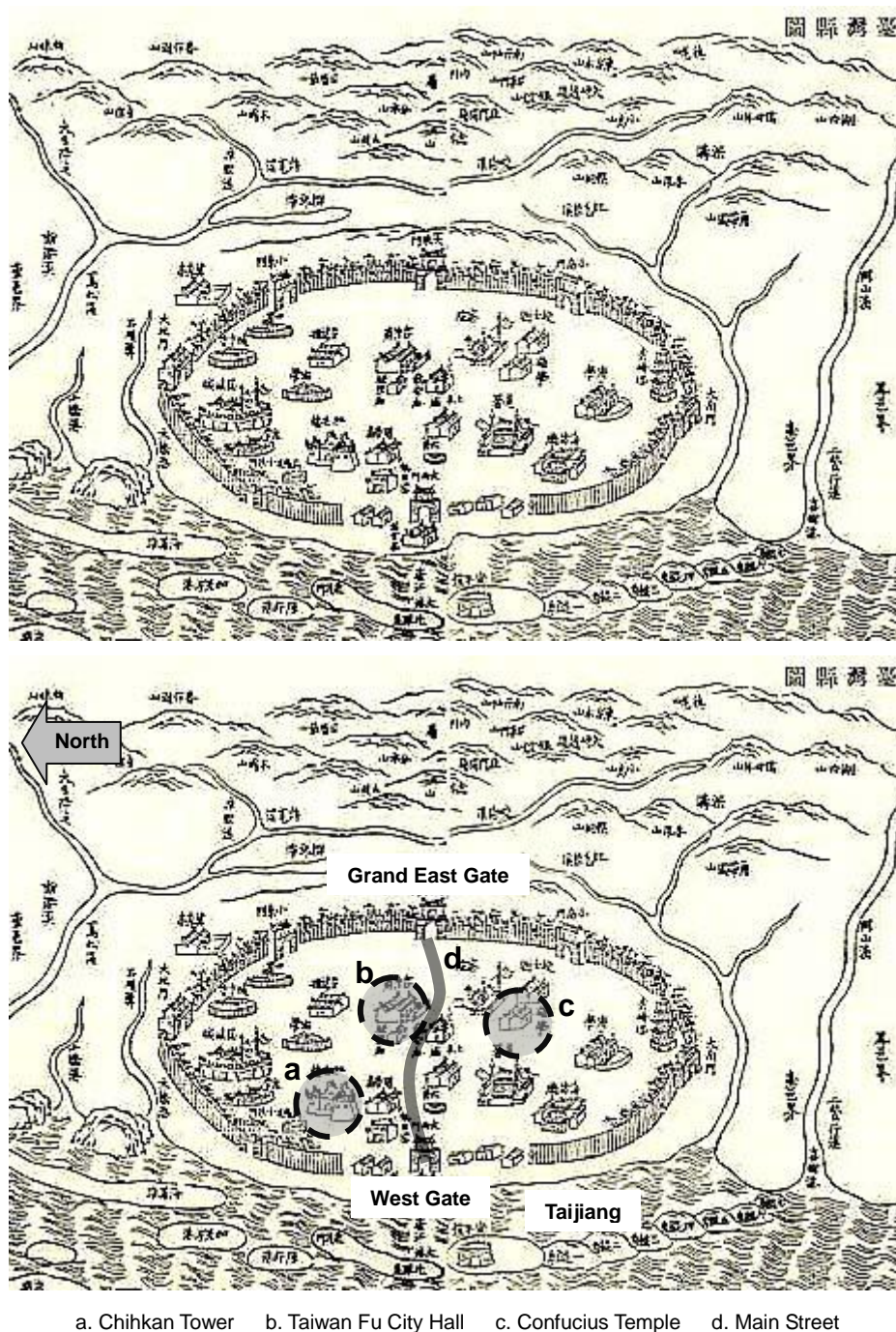


Figure 6.4 Tainan with wooden city walls in 1747 (Fan 1961 [1747])

Due to economic considerations, the city walls of 1725 were formed by wooden palisades rather than earthworks. Also, because the coastline, the western boundary of the city, served as a natural defence for the city, as can be seen in the ancient Chinese map in Figure 6.4, the city walls did not completely surround the city. The West Gate in this case did not really function as a gate, but functioned rather like a watchtower. In order to improve the defensive capacities of the structure, hedges of thorny bamboo were then planted along the wooden walls in 1734, with further planting in 1775 (Wu 2007: 77). These wooden walls are also drawn in Figure A3 (p.188), the map of Tainan in 1752. As this diagram shows, the areas to the north of the main developed areas inside the north walls were occupied by barracks, while the lands near the south walls were used for cemeteries.¹⁰ These elements might limit the urban spread towards these orientations. Comparing this with Figure A2 (p.188), we can see that most of the new developed areas in Figure A3 (p.188) were to the east and the west of the older parts of the city. While the eastward developments virtually gathered only along Main Street, the westward developments spread unhindered over the coastal areas. As trading was one of the most important commercial activities in Tainan at that time, more and more commercial development towards the coastal areas for better overseas trade and shipping was a consequential result (Ke 1998: 52).

Double cores and axial growth (1788-1822)

In 1788, the wooden city walls were replaced by pise (rammed earth) walls. At this time, the governor decided to extend the wall to the western edge of the city. But the coastal geology was not suitable for heavy construction, so, as Figure A4 (p.188) illustrates, the location of the Grand West Gate was determined to be around 400 metres from the former West Gate (Chan 2006: 25). This decision caused the demolition of many existing buildings, and the exclusion of the coastal living spaces, the Five-Canal area, from the walled area. As a consequence, the older part of city centre was eventually

¹⁰ See also Figure 5.4.

fully enclosed by the wall penetrated by a set of eight gates.¹¹ In order to protect themselves, the residents of Five-Canal built wooden outer city walls surrounding their living areas by themselves in 1805 (Chan 2006: 20). The outer city walls are also drawn in Figure A4 (p.188), the map of Tainan in 1807.

After the establishment of the pise city walls, Main Street, the east-west axis, was defined by the Grand East Gate and the Grand West Gate. At the time, the city was densified with more haphazard streets and alleys. As can be seen in Figure A4 (p.188), the new developed areas at the time were mainly situated inside and outside the pise walls to both the north and the south of the Grand West Gate. As Po-Wang Chan noted, the areas surrounding the Grand West Gate were the busiest part of Tainan in the 19th century (2006: 113). It is clear that in terms of urban growth a new concept of centre in this city had formed in the location of the Grand West Gate. This situation also caused slow development in the areas near the Grand East Gate.

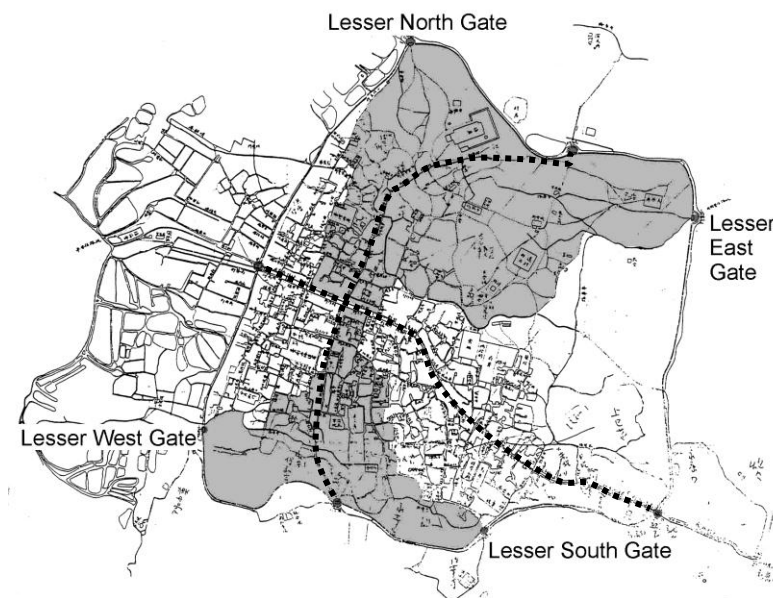


Figure 6.5 Boundaries of four neighbourhoods

¹¹ The walls were 6.4 metres thick and the construction caused around 1000 houses to be destroyed (Chan, Fan, and Chen 2005: 75).

Since the developed area of Tainan had become much larger than it had been in the Koxinga period, the boundaries of the four neighbourhoods were redefined so as to include the new developed areas. According to Hsien (1962 [1807]), the boundaries of neighbourhoods were the lines along various alleys from the intersection point of two main axes to the Lesser East Gate, Lesser North Gate, Lesser West Gate and Lesser South Gate (Figure 6.5). Acting as the arteries of each neighbourhood, the cross-axes were still important to the urban life at that time. Thus, although the majority of urban growth at the time was around the Grand West Gate, as can be seen in Figure A4 (p.188), there were also some new developments along the cross-axes.



Figure 6.6 Matrix routes for modular expansions (edited from Figure A4, p.188)

In this case, as Figure 6.6 illustrates, the model of urban expansion in the Qing period was clearly dominated by three major axes with two cores – the intersection points of the cross-axes and the Grand West Gate. Now we can employ the Italian typomorphological concept of matrix routes explored in Chapter 3 to grasp the logic of urban growth. The ring-like growth of the city in this

period was in fact ruled by particular axes and, in the Italian typomorphological terms, these axes can be understood as matrix routes for the spread of modular building plots. As we have seen in Chapter 3, a hierarchy of matrix routes can be found according to the orientations of building plots. As can be seen in Figure 6.7, the axis A was more important than the axes B as the building plots were facing axis A to continue its street elevations. Based on the orientation of building plots, this concept also helps us to understand other minor axes. Thus, we can capture the axial growth model of Tainan in the Qing period as Figure 6.7 represents it.



Figure 6.7 Urban tissue formation of central Tainan during the Qing Period (edited from the cadastral map of 1875 Tainan in Ke, 1998)

The 'mature' stage of urban spread in the late Qing period (1823-1895)

Due to a heavy rainstorm in 1823, the Taijiang lagoon was silted up and as a result the land had almost connected the walled city and Anping.¹² In this circumstance, the existing wooden outer city walls were considered to be not strong enough in military terms. Also, due to the growth in trade, the Five-Canal area had become more and more prosperous, and had overtaking the walled central city centre areas in commercial importance, and thus was in need of better protection. This situation motivated, in 1835, building the west outer city walls in brick and maintaining the wooden east outer city walls. As can be seen in Figure B1 (p.189), the east outer walls simply surrounded the residential areas along the Main Street extension, while the brick west outer walls, replacing the former wooden outer walls, enclosed the whole Five-Canal area (Chan 2006: 27; Ke 1998: 48-49).

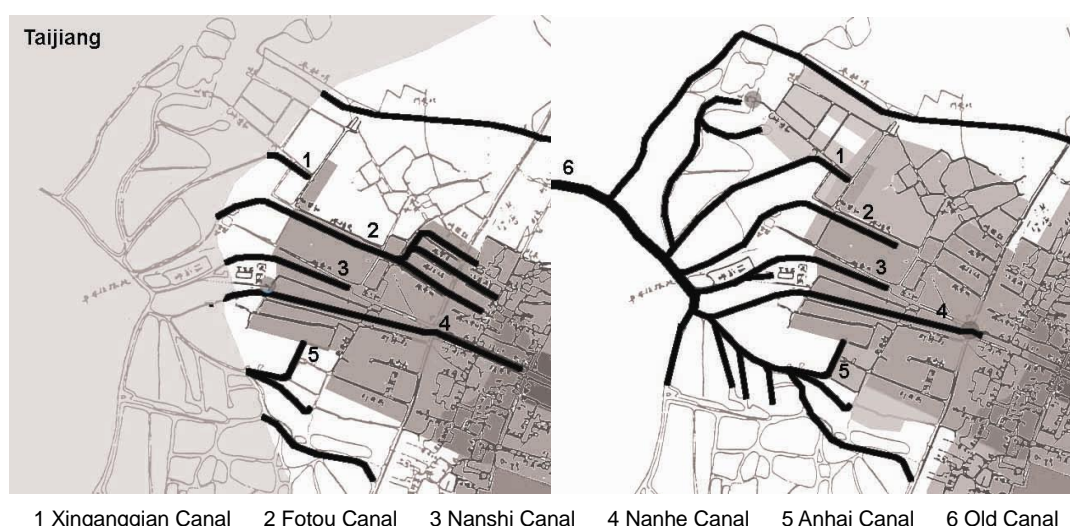


Figure 6.8 Geography of Five-Canal area in 1752 (*left*) and 1875 (*right*) (edited from Figures A and B)

The disappearance of the Taijiang lagoon due to the heavy rainstorm also caused some fundamental changes in the urban fabric of the Five-Canal area. The Five-Canal area basically consisted of various merchants' premises, along with many trading companies, shipping companies, warehouses, and

¹² According to Wu, when Koxinga's troops first landed on Taiwan, their fleet could not approach the shore successfully due to the shallow Taijiang, and the soldiers were then asked to walk through the waist-deep water for landing (1997: 19). This description shows that Taijiang was in fact quite shallow and thus this great tract of sea could easily be filled up and become new land.

associated retail outlets. When Taijiang existed as a lagoon, the exported goods from Five-Canal could be transported through the lagoon by rafts or sampans for transfer to larger ships in Luermen, a large port near Anping. After the Taijiang lagoon disappeared, as Figures 6.8 and B1 (p.189) show, a watercourse, Old Canal, was dredged for connecting Five-Canal with Luermen so as to continue the longstanding transportation route. In addition, as Figure 6.8 shows, the street pattern in the area developed by following the shape of canals. This development was driven by the convenience of trading and transporting goods along the canals. In 1752 some canals, such as Fotou Canal and Nanhe Canal, ran deeper into the city, while those parts of canals had become streets in 1875. Thus part of the 19th century street fabric in the Five-Canal area was in fact derived from the 18th century pattern of canals.

Comparing Figures B1 (Tainan in 1875, p.189) and A4 (Tainan in 1807, p.188), we can see that there were not many morphological changes in Taiwan Fu in the 19th century. Apart from the changes to the outer city walls and canal system caused by the disappearance of Taijiang, the main areas that developed followed historical patterns. In fact, according to street surveys, while fifty new streets (including alleys) emerged in Taiwan Fu during the period 1752-1807, only nine new streets (including alleys) developed during the period 1807-1830, whereas hardly any new streets developed at all during the period 1830-1875.¹³ It is clear that the urban spread of Tainan had slowed down in the 19th century. In addition, Taiwan Fu in 1811, 1885 and 1900 had a population of, respectively, around 70,000, approximately 60,000-70,000, and about 60,000.¹⁴ So clearly there was a slight decrease in Tainan's population in the 19th century. This demographic evidence and that of the pattern of street development indicate that the development of the city had approached a mature phase wherein the city growth had reached a kind of natural limit.

¹³ See street surveys in Chen (2007 [1830]), Hsien (1962 [1807]), Hung (1979: 60) and Ke (1998: 41).

¹⁴ See Ke (1998: 66), Imbault-Huart (1958 [1893]) and the *Tainan City Comprehensive Development Plan* (<http://gisapsrv01.cpami.gov.tw/CPIIS/cprpts/index.htm>).

As for the relatively undeveloped areas, in Figure B1 (p.189), we can see that in 1875 the areas near the Grand North Gate were still occupied by barracks and the areas near the Grand South Gate were still used as cemeteries. While the fields to the east of the main developed areas remained almost wild, the lands between Five-Canal and Anping over the location of former Taijiang lagoon had become a huge tract of fish farms. The growth of these fish farms was a consequence of the natural small streams and ponds produced by the silting up of the Taijiang lagoon. These peripheral urban elements remained almost unchanged until the end of Qing domination.

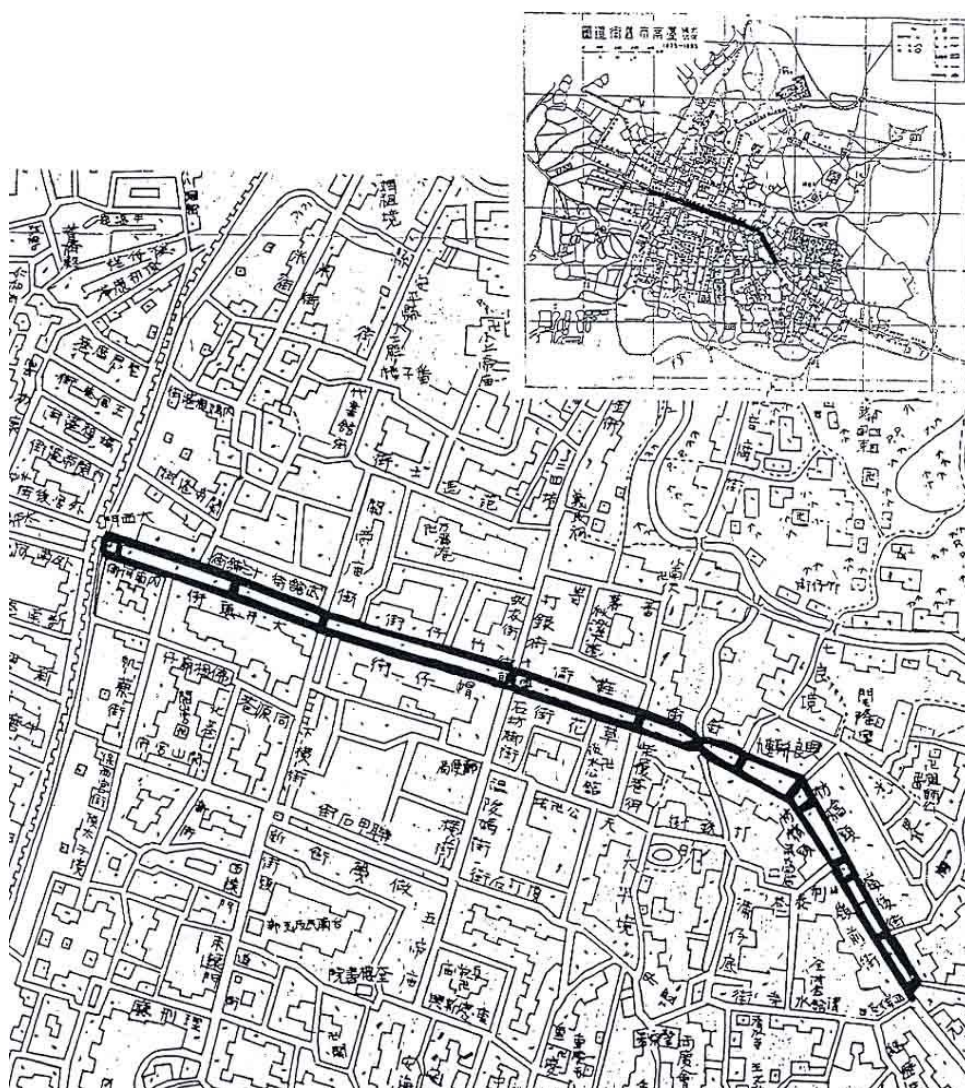


Figure 6.9 Labyrinthine alley fabric (Ke 1998: 89)

Labyrinthine alley fabric

Under Qing rule, apart from the formal developments of the city walls and some public facilities, the fabrics in the city were developed freely and haphazardly. As can be seen in Figure 6.9, excluding the main axes (Main Street is emphasized in the diagram) and some perpendicular secondary streets, most of the streets in the city appear irregular in shape. They can also be seen in Figures A3, A4, and B1 (pp.188-189). These streets were often very narrow, normally around 2-4 metres in width. Also, as mentioned earlier, Main Street had been divided into two parallel 3-metre-wide streets (see Figure 6.9). It seems that this width was probably the most appropriate scale for a street at that time. In this case, most of the streets that developed in the Qing period should be understood as alleys.

As Kwang-Chin Huang (1997) suggested, such wandering alleys with their capricious variations in width had produced the unique morphological character of Tainan. Concerning this fabric, Chu-Hsiang Chou gave the following vivid description:

When walking through the alleys around the areas of Chenggong Road, Minzu Road and Chikan Street, you will find they are sometimes narrow, sometimes unexpectedly spacious; sometimes smooth, sometimes undulating – the experience is extraordinary. Then the alleys around the areas of Zhongzheng Road, Minsheng Road, Yongfu Road and Ximen Road are tortuously wandering with capricious scales in width, and the forks in these alleys are sometimes with two branches, sometimes with three branches.¹⁵

(Chou 2003: 84)

The areas mentioned in this description are situated in the oldest part of Tainan, near the intersection point of two ancient axes and the Grand West Gate. The roads that Chou refers to were developed in

¹⁵ This description is in my translation. Original texts: 走進成功路、民族路、赤崁街之街路兩旁巷道，或狹窄、或豁然開闊；或平坦、或起伏，落差極大；在中正路、民生路間的永福路，及西門路二旁巷道，則崎嶇曲折，寬窄不一，高低起伏。巷內或三叉，或四叉。

the Japanese Colonial Period. Yet in fact such urban fabric can also be found anywhere that was densely developed in the Qing period, as can be seen in Figures A2, A3 and B1 (pp.188-189). Although such a unique fabric has attracted the interest of many urban historians,¹⁶ the reason for its formation is rarely discussed. According to Chou's conjecture, there may have been that a number of small streams running across the city in the early stage of Tainan's development, and that buildings were developed along these wandering streams, and that the streams were eventually filled in to become alleys (2003: 84). However, the factual reasons for this development sequence still need of further research. Although we have no exact idea how this urban fabric was formed, the work to understand its development helps to value it as an important aspect of the heritage of the city. The morphology of this pre-modern alley fabric will be explored further in Chapter 7 through a set of case studies.

6.2 ISLANDIZATION: CHANGES AFTER 1895

Taiwan was ceded to Japan in 1895 as a result of the Qing Empire's defeat in the Sino-Japanese War. As Taiwan was the first colony of Japan, the colonial governor's attitude of rule was very active so as to ensure the maintenance of Japanese dignity (Chen 1988: 61; Wu 1997: 106). The Japanese colonial authorities reformed the cities in Taiwan on Western modernist planning principles to demonstrate that Japan was as powerful as the Western imperialists (Ching 2001: 17). The planning principles that the Japanese implemented including the boulevard planning ideas of 19th century London and Paris, the concept of planning for public health of 19th century London, and the housing and urban planning legal system of early 20th century London (Hsu 1995: 92). Thus in this early colonial period, the urban structure of Tainan was changed radically. This change was governed by the 'City Improvement Plan'

¹⁶ For example: Hsing-Chang Hu (2007), Kwang-Chin Huang (1997) and Chuan-Wen Sun (1992).

(市區改正計畫) of 1911, a Haussmann-like urban reformation plan. Under this plan, the major urban elements of Tainan were shifted from the historic cross-axes and city walls to an extended grid and circus structure. The structural system of this city was also changed from relatively coherent, historically accreted urban fabric to one characterised by a fragmented condition of islands and enclaves. The city now broke with its historical pattern of accreted development along various major and minor axes, and was planned according to modernist urban principles as refracted through the eyes of Japanese colonial urban planners. As the issue of structural reformation is more significant than urban expansion in this period, the following section will shift emphasis from the city's expanding ring-like formative process to a more palimpsest-like pattern of development.

The Initial Stage of the Japanese Colony (1895-1910)

The City Improvement Plan was begun in 1911; thus while the period 1911-1945 is usually called the 'urban planning and reforming phase', the period 1895-1910 is often understood as the 'germination phase' (Huang 1996: 37; Wu 1997: 106). The approach to the modernization of Tainan carried out by the Japanese was based on science rather than on the existing local culture (Hsu 1995: 93). In this germination phase, the Japanese conducted land surveys, investigations into native costumes, and implemented population censuses as the fundamental tools for ruling Taiwan (Wu 2007: 116; Yanaihara 1999 [1929]: 7-8). At the time, the maps of Tainan drawn by the Japanese were very accurate and objective, which made them very different from the earlier Dutch and Chinese maps of Tainan. This shows that, compared with the previous governors, the Japanese comprehended the colonial city in a relatively more scientific manner.

In this initial period of colonization, in order to improve the quality of life in Tainan, the Japanese governor widened some major streets in the city and enacted rudimentary building regulations. Thus,

this period is also known as the ‘phase of house and street improvement’ (Wu 1997: 106). This period was basically the preparation stage for the radical changes which followed in the subsequent stage. In this circumstance, the urban changes in this period were not particularly dramatic. But we still have to understand those influential changes, including the transition from commercial shipping mode in the Five-Canal area, and the actions of widening streets and demolishing the city walls.

Transitions of commercial mode and urban structure in Five-Canal

In the initial period of the Japanese colony, most of the canals in Five-Canal were filled up to serve as streets. This change was mainly caused by the silting up of the canals and the decline in trading business. Before 1784, Luermen was the sole international trading port in Taiwan. Subsequently, with more and more ports established in Taiwan, the volume of trade in Tainan decreased. In addition, as the canals had been choked again and again every time Taijiang silted up, the cost of their maintenance was high. The need to transfer goods to rafts or sampans from large ships to transport goods to the city cost a lot. Therefore, it was considered inconvenient and uneconomic to use this port and so the number of trading ships in Luermen reduced dramatically in the late 19th century (Wu 1997: 86-88).¹⁷ This situation finally led to the closure of Five-Canal’s trading business. As for the silted-up canals, the Japanese filled them in and turned them into streets, as can be seen in Figures B2 and B3 (p.189). That is to say, today’s alley fabric in this area is actually inseparable from the former canal system.

After the decline of the sea-borne trading business, Five-Canal hosted a range of more local retailers and vendors, and thus this place remained a bustling part of the city, although the focus had now shifted eastward to the area near the Grand West Gate so as to connect with the Main Street

¹⁷ According to Chen (1994) and Yao (1960 [1867]), there were nearly 400 overseas trading ships in Luermen in the 18th century, but only around 25 ships in the late 19th century.

commercial area (Wu 1997: 95-96). In this case, in the early years of the Japanese colonial period, the Grand West Gate continued to be the centre of commercial activities in Tainan and became even more bustling than it had been in the Qing period. The Japanese, however, regarded these bustling streets around the Grand West Gate as narrow, badly drained, dirty and unhygienic, and posing difficulties for the movement of traffic (Hayakawa 1987 [1937]: 79). Therefore, although this area was crowded, there were few Japanese residents. It was then marginalized by the Japanese in the subsequent urban planning system (Ke 1998: 109).

The actions of widening streets and demolishing the city walls

Under the Japanese rule, by the end of 1895, the railway had connected Tainan and Kaohsiung, and in 1898 it had connected Tainan and Taipei. As can be seen in Figure B2 (p.189), Tainan's railway station was located on the relatively undeveloped large field to the north-east of the densely developed areas of the city. Being near the barracks and proximate to the old city, this location would allow rapid movement of goods and troops and enhance military control. At the same time, a light rail system was developed to connect central Tainan and Anping (Wu 1997: 110). These two railway developments effectively concentrated the development of the city away from the coast towards the east. This further marginalized the port area (Hsu 1995: 95).

Along with the development of the railway system, and in order to improve public health, sanitation, water reticulation, and traffic flows in the densely quarters of the city, the Japanese began to demolish the city walls and widen significant streets. The outer city walls were destroyed immediately at the beginning of the Japanese period. Then large parts of the pise west walls, including the Grand West Gate, were demolished in 1901 and, as can be seen in Figure B2 (p.189), the line of the former west walls was replaced by a street. As a result, the bustling area outside the former west walls was integrated with the Main Street commercial area inside the former west walls. Also, small sections of

the east walls were destroyed for the eastward extension of military lands (Hsu 1995: 94). All the buildings on the centre line of Main Street were removed in 1907 and thus the width of this street returned to fifteen metres (Ke 1998: 130). Then the north-south axis (the principal cross-axis) was widened, and the east-west street, parallel to Main Street, was also widened. Both of these widened streets had by then become important arteries of the city. In addition, a new east-west street in front of the railway station was developed to connect the station and the street on the line of the former west walls. This route, which also carried the light rail, allowed direct transport from Anping to the railway station without passing through the crowded older parts of the city.

In the meantime, the Japanese governor enacted rudimentary building regulation that sought to control building lines and heights. The aims of these building controls were to stimulate not only a better visual urban landscape, but also for an improvement in public health (Hsu 1995: 98-99). Also, the railway, light rail and new street systems had become the foundation for the carrying out of the City Improvement Plan in the next phase. In effect, the traditional Chinese walled urban structure was destroyed and progressively replaced with a modern urban structure.

The City Improvement Plan and Its Influence (1911-1945)

The City Improvement Plan was enacted in 1911 because the Japanese considered the condition of the Qing-period labyrinthine alley fabric offered poor drainage, was unsuitable for traffic, vulnerable to earthquake and fire, and unfavourable for military control (Huang 2000: 187). As can be seen in Figure B3 (p.189), the primary effects of this plan were the formation of urban blocks, the redefinition of city's territory, the shift of city centre, as well as the establishment of modern public works. This plan was used until 1936 when it was replaced by the 'Taiwan Urban Planning Ordinance' (Hsu 1995: 93).

Grid and circus structure

The city walls of Tainan were almost completely removed for street development under the City Improvement Plan. As Figure B3 (p.189) shows, the reformed fabric of the city was dominated by a grid and system of radiating streets punctuated by six circuses. In this plan, the most important public buildings, including Tainan City Hall, the City Police Bureau and a fire station, were gathered around the central circus, the present-day Minsheng Green Park Circus (then called Taisho Park Circus). In Figure B3 (p.189), we can see that the most important axis at the time, the widest of the newly developed streets, was the one running from the railway station circus, passing through this central circus. This axis runs westward to the wharf of the newly developed Tainan Canal. The Tainan Canal, running from this wharf through Anping to the sea, was developed in this period along the remaining streams of Taijiang for transporting farm products and to support the development of fish-farming (Wu 1997: 116).¹⁸ Clearly, with this new axis passing through it, the central circus had become the administrative and dominant hub of Tainan. This new system, as Figure 6.10 shows, completely ignored the former axes and the pattern of centres (intersection point of cross-axes and the Grand West Gate) that had developed in the Qing period. With the practice of this new system, the conceptual definition of the city's territory had also been changed. The city was no longer defined by the walls, but by the streets on the edge of the planned areas. This is why the Japanese at that time called these planned areas the 'city area' (Hsu 1995: 94).

¹⁸ At around 3.8 kilometres in length, Tainan Canal has been the longest canal in Taiwan. It is noticeable that the purpose of this construction was different from the motivation of the Old Canal development in the Qing period.

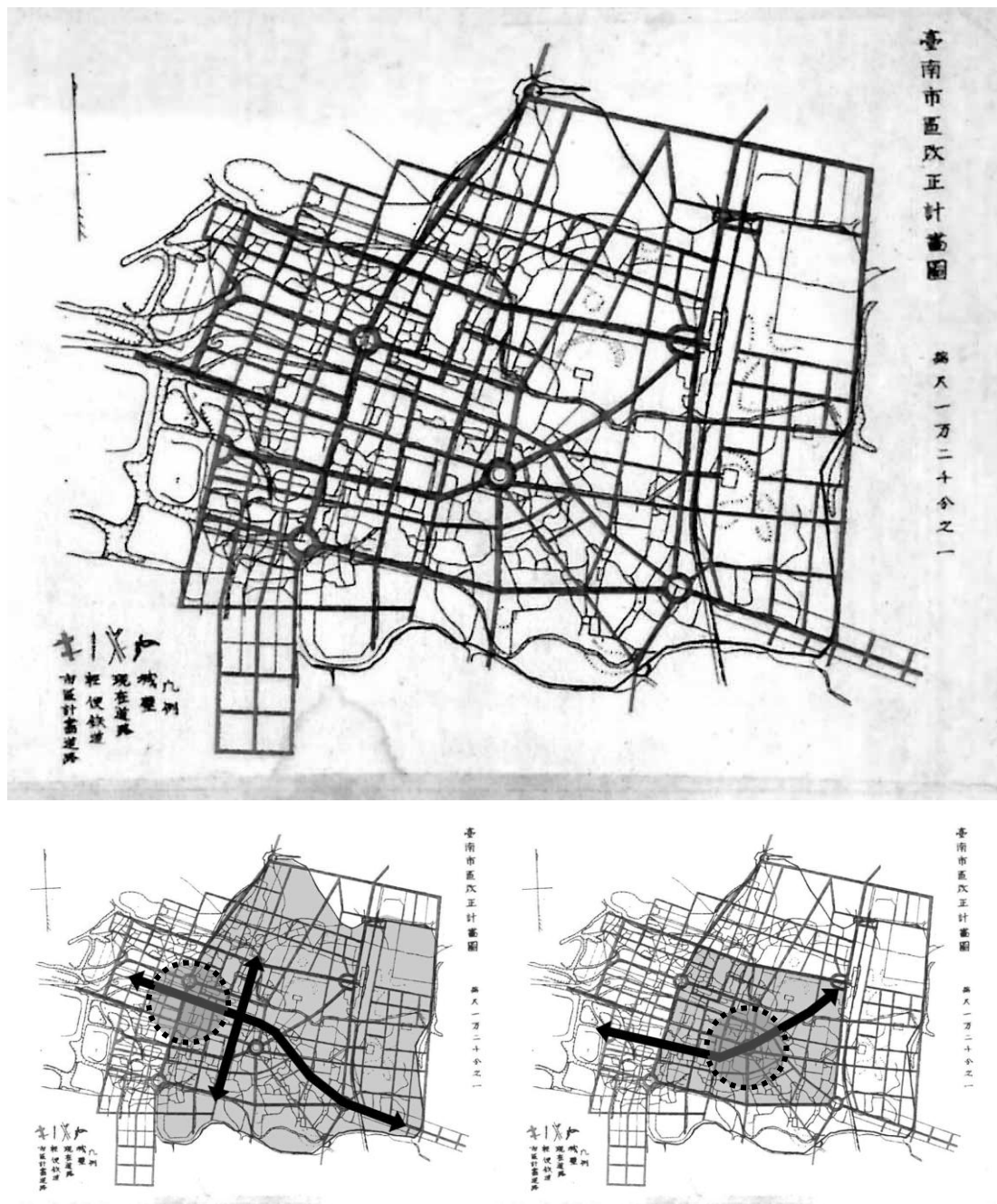


Figure 6.10 Original drawing of the City Improvement Plan (*top*) (Huang 2000: 52); former concepts of urban growth centres (the Grand West Gate and the intersection point of axes), cross-axes and walled city area (*bottom left*); new concepts of dominating centre, main axis and city centre area (*bottom right*)

According to the initial versions of the City Improvement Plan of 1911 (Figure 6.10), the city centre was defined by four circuses with another circus in the centre; this defined area is shaded in the bottom right diagram of Figure 6.10. All the radiating streets were confined to this area. Beyond this

area, in the north and east of the city centre, the city was planned as larger urban blocks. Since these areas were relatively undeveloped in the Qing period, they were planned now for those developments that need larger sites, such as schools, hospitals, parks and barracks. Yet the area to the west of this new defined city centre area, the most bustling area in the Qing period, was planned with smaller blocks with secondary streets. This former city centre was clearly marginalized by the Japanese.

Comparing Figures 6.10 and B3 (p.189), we can see that there were six circuses in Figure B3 (p.189), the map of Tainan in 1945, but only five circuses in Figure 6.10, the 1911 initial plan. In fact, the sixth circus was planned in 1924, to be located to the east of the railway and to preserve the Grand East Gate at its centre. In practice, the Japanese had not finished implementing this plan by 1945, the final year of their colonial occupation and many aspects of the plan, such as the secondary street pattern in the old city (Figure 6.10), were not built.

The concept of blocks

Because of the grid system that the Japanese applied through their City Improvement Plan, the spatial pattern of residential neighbourhoods in Tainan was changed. In the 19th century, apart from the four-neighbourhood administrative division, the most important spatial idea in Tainan for residential neighbourhoods was the '*jing*'. A *jing* was a united domain of several temples, and the temples would function as the community centres of a *jing*. This idea made residents of a specific area cohere around a commonly held religious conviction, and to form a territory for self-defence. Also, the neighbourhood emotional relationship of a *jing* could be maintained through the temple activities (Chung 2006: 2.7-2.8; Ke 1998: 78-79). Following the introduction of the urban grid by the Japanese, the wider social aspects of the concept of *jing* were compromised, and it was reduced to having a

more narrow religious effect only.¹⁹ The continuity of neighbourhood activities was effectively severed by the newly planned streets, so the new blocks that the streets formed shifted the neighbourhood identity. Thus, from this time, the idea of a neighbourhood in Tainan has generally been tied by the concept of the urban block.

Since the elevations of street houses on the planned streets were reconstructed after the development of these streets that cut through the old cityscape of Tainan, the city today is dominated visually by the building style developed in this period. Under the control of building regulations, the building lines and elevations of houses on the planned streets were well ordered. This new urban fabric was supplemented by a further set of regulations that governed the pavements and pedestrian areas. These spaces, called '*Ding-a-ka*', were covered pavements, pedestrian pathways running along the front of a row of street houses covered by the overhanging upper floors for protecting the pedestrians from the sun and rain.²⁰ According to the regulations, the width of *ding-a-ka* spaces in Tainan was stipulated to be around 3.5-4.5 metres, and they were only to appear on the perimeter of a block.²¹ As can be seen in Figure B3 (p.189), the size of a block was quite large. Although the city's fabric had been dominated by block structure, the labyrinthine alley fabric developed in the Qing period could still be found in the interior of these blocks. Since *ding-a-ka* spaces provided better conditions for commercial activities, shops were mainly located on the planned streets, rather than on the alleys inside the blocks. In this case, the area inside a block became more residential and private in character, in contrast with the perimeter of a block which was regarded as more commercial and public. As a

¹⁹ The idea of *jing*, or *lian-jing* (united operation of *jing*), was developed in the 19th century to undertake defensive affairs. The organization of a *jing* was run by local neighbourhoods to take charge of public security and that extended the defensive system of the government through the power of the private sector (Wu 2007: 150). A *jing*, based on the domains of temples in a specific area, had a clear administrative boundary, and, apart from its defensive function, the organization of a *jing* also ran religious activities for the neighbourhoods of the area. However, since this social system had no physical feature, the Japanese colonial government had no idea about this concept and reformed the city without taking this into account. The defensive system of a *jing* was then broken due to the development of grid street system.

²⁰ *Ding-a-ka* is also understood as 'qilou', similar to the idea of the 'five foot way' of Malaysia and Singapore.

²¹ When the width of street was less than 8 metres, *ding-a-ka* spaces were unnecessary; when the street was 8-14.5 metres in width, the width of *ding-a-ka* spaces had to be 3.5 metres; when the street was 14.5-20 metres in width, the width of *ding-a-ka* spaces had to be 4.0 metres; and when the street was wider than 20 metres, the *ding-a-ka* spaces had to be 4.5 metres in width (Huang 1987: 153).

consequence, a marked distinction in character between the inside and the outside of the blocks developed, and this reinforced a structural opposition between the labyrinthine alley fabric of the Qing and the grid system of Japanese colony.

The formation of this pattern of blocks, with an internally-oriented neighbourhood in contrast to a more public, externally-oriented perimeter, characterised a sharp shift from a relatively coherent traditional urban fabric to a more fragmented condition of islands and enclaves. This islandized urban structure has consistently dominated all the subsequent postcolonial development in the city.

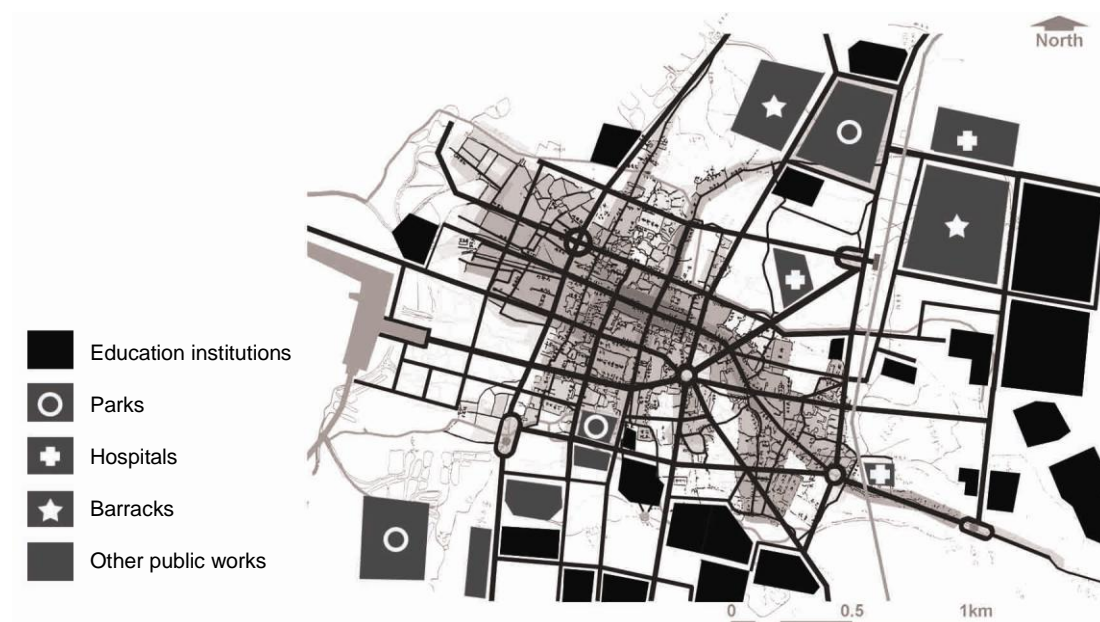


Figure 6.11 Fringe belt morphological character (edited from Figure B3, p.189)

Fringe belt

As Figure 6.11 shows, in the Japanese Colonial Period, many modern facilities that required larger lands and locations closer to the city centre, such as hospitals, parks, stadiums and education institutions, emerged by 1945 in the periphery of the densely developed city centre area. Yet, as Figure B3 (p.189) shows, some of the west peripheral areas were still used as fish farms at that time due to

their special landform and thus it seems that fewer of these larger public facilities emerged in that area. By contrast with the densely developed city centre area, such peripheral developments formed a special belt fabric. Any subsequent urban expansion then had to leapfrog this belt area. As a result, this belt area had become the boundary between the older urban fabric and the postcolonial residential accretions. In principle, as we have seen in Chapter 3, this belt morphological character can be understood as ‘fringe belt’, and is a typical, often generic, phenomenon of urban expansion.

Postcolonial Urban Development (1945-2010)

With the surrender of Japan in World War II, the colonial government was withdrawn from Taiwan in 1945. The Kuomintang (KMT or Chinese Nationalist Party) regime came to Taiwan in 1949 and continued to work with the Japanese urban planning system in the 50s.²² However, due to the poor economic conditions in the post-war period to the 1970s there was very little change in the city centre fabric of Tainan (Fu 1995: 85). Although the fabric of the city centre underwent almost no change in that period, the wider city spread rapidly as a result of a sharp increase in population. While there were only around 160,000 residents in Tainan in 1945, by the 1960s this number had grown to more than 400,000. However, the population of the city centre showed almost no growth as almost all the increased population settled in the new developed residential areas to the north and the east of the city centre, outside the fringe belt areas (Chou 2003: 16).

The rapid economic growth of Taiwan from the late 1970s has seen greater activity in the construction sector with the building of modern public facilities and commercial buildings. The residential areas developed in the 1950s and 1960s outside the fringe belt had been much denser and progressively

²² The KMT Party, also known as the Chinese Nationalist Party, was the founder of the Republic of China (founded in 1911). Taiwan was returned to China in 1945. But when the mainland was seized by the communists in 1949 (they then founded the People's Republic of China), the KMT came to Taiwan and governed this island.

became self-sufficient, mixed-used districts. Also, some streets were widened at the time due to the increase in traffic volumes. Although Tainan itself developed quickly in that period, the changes in the city centre were mainly of some small rebuilding projects based on existing plots. Thus, in the late 1970s, the city centre fabric still clearly retained the character it had gained through the urban developments of the Qing and the Japanese periods (Fu 1995: 83).

Unfortunately, during the period 1980-1995, the government planning authority intervened radically and destructively on the accreted and islandized fabric of central Tainan. They widened many streets and subdivided existing large blocks in the city centre. They did so to increase the value of land and to improve the traffic flow. The government considered that the blocks in the city centre developed by the Japanese were too large and the labyrinthine alley fabrics inside the blocks were very inconvenient for traffic and detrimental to commercial development (Chung 2006: 4.7). Comparing Figures B3 and B4 (p.189), we can see that most of the streets of today that cannot be found in the 1945 map of Tainan were developed in this period. In fact, the main outlines of the KMT government's planning initiatives were already present in the Japanese colonial City Improvement Plan (Figure 6.10, p.181). It is clear that the new government continued the modern planning project, and fulfilled what the Japanese had not finished by 1945. In addition, the streams running through Tainan were covered as part of the city's drainage system and in order to reclaim more land for development. The fish farms were filled in for suburban commercial developments. At the same time, many historic buildings were replaced by modern buildings. The changes were recognized as being destructive and were criticized by many scholars in the mid 90s, such as the architectural historian Fu Chao-Ching (1995) and the urban theorists Huang Kun-Shan (1995) and Yang Jen-Chiang (1995).

It seems that the government has been responsive to these criticisms. Since 2000, the concept of urban conservation has been considered as a central principle in Tainan's urban planning scheme. Today,

there are nearly 800,000 residents in Tainan. The urban area has become many times larger than the city centre area we are exploring in this thesis. Yet the richness and significance of the historic quarters of Tainan suggest that any ongoing valuing of urban heritage in this city must engage directly with the city centre.

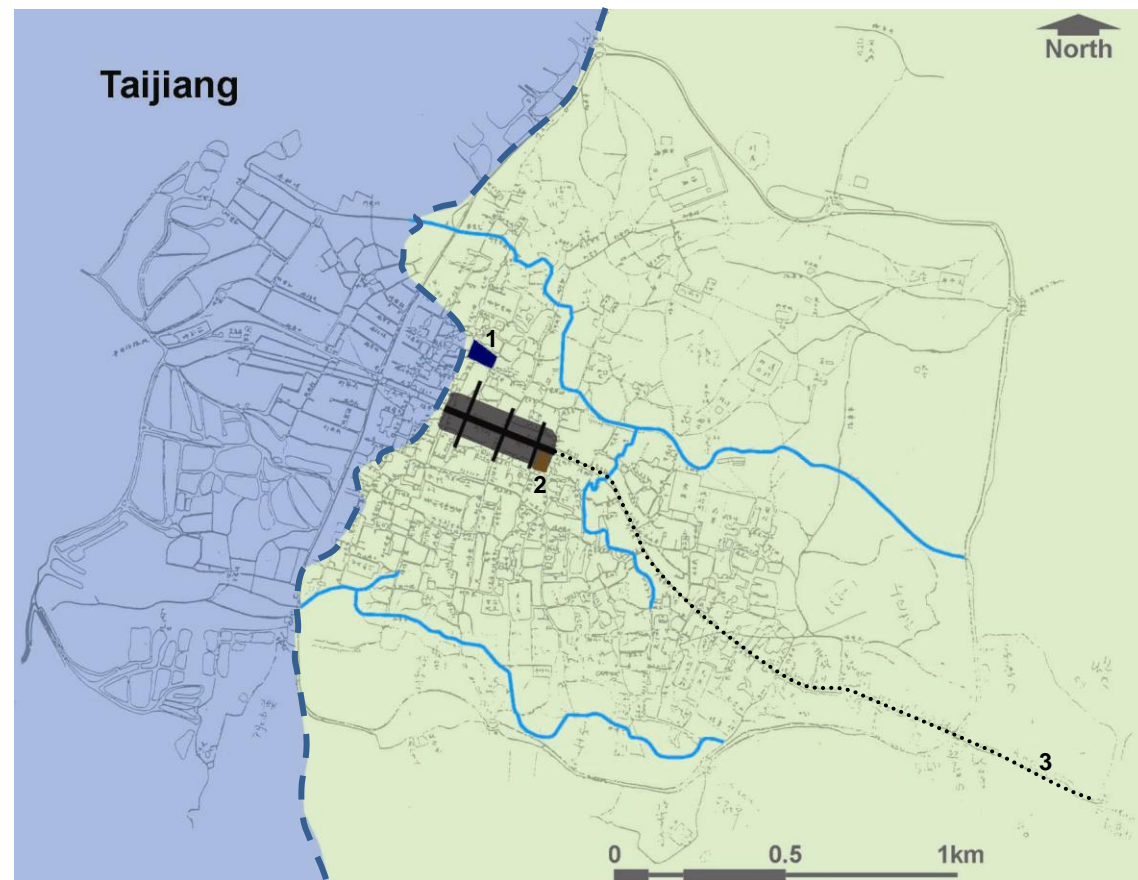


Figure A1-4

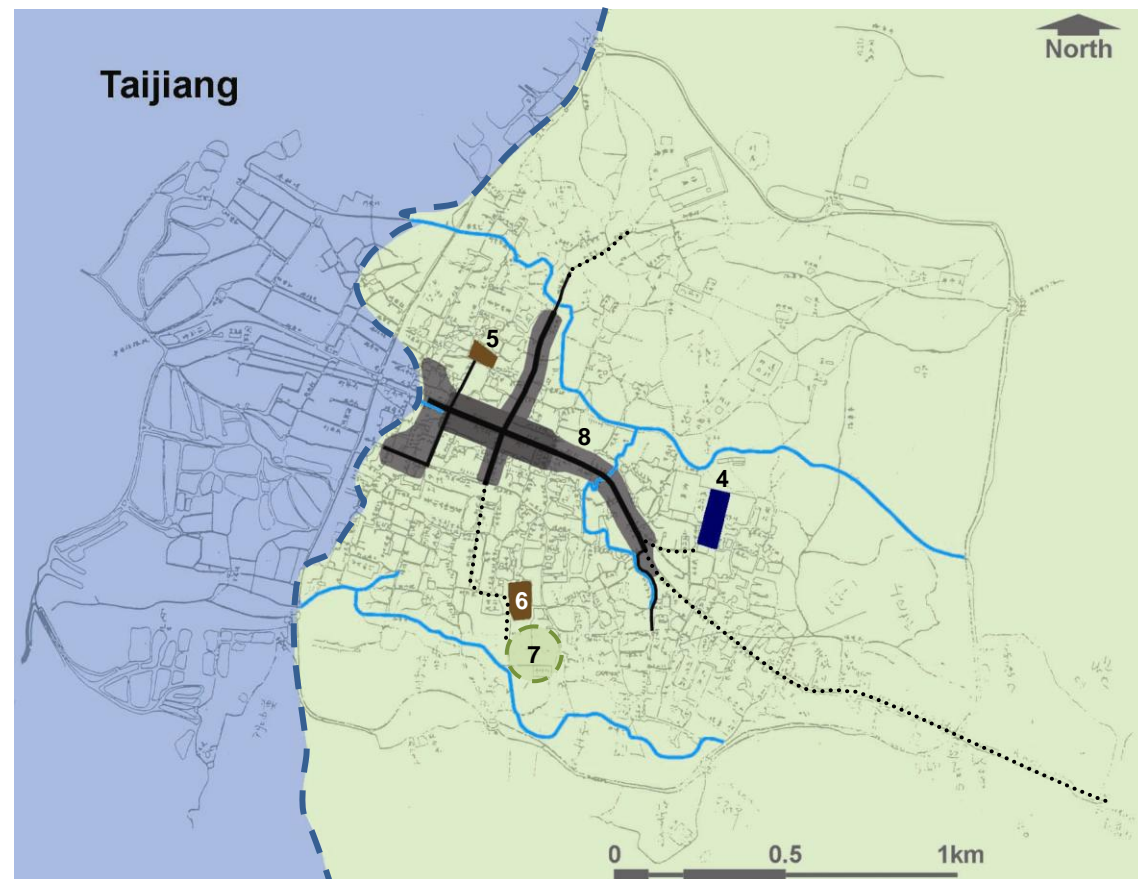
- areas developed by 1661
- areas developed in 1661-1683
- areas developed in 1683-1752
- areas developed in 1752-1807
- government buildings
- main public buildings
- streets and alleys
- outskirts of the city
- major city walls
- secondary city walls
- water elements
- parks and gardens
- case-study blocks

A1: Tainan in 1661 (top left)

- 1 Fort Provintia
- 2 hospital
- 3 country path (to the cultivated field)

A2: Tainan in 1683 (bottom left)

- 4 Chengtian Fu City Hall
- 5 Chihkan Tower (Fort Provintia)
- 6 Confucius Temple
- 7 farmers market
- 8 Main Street

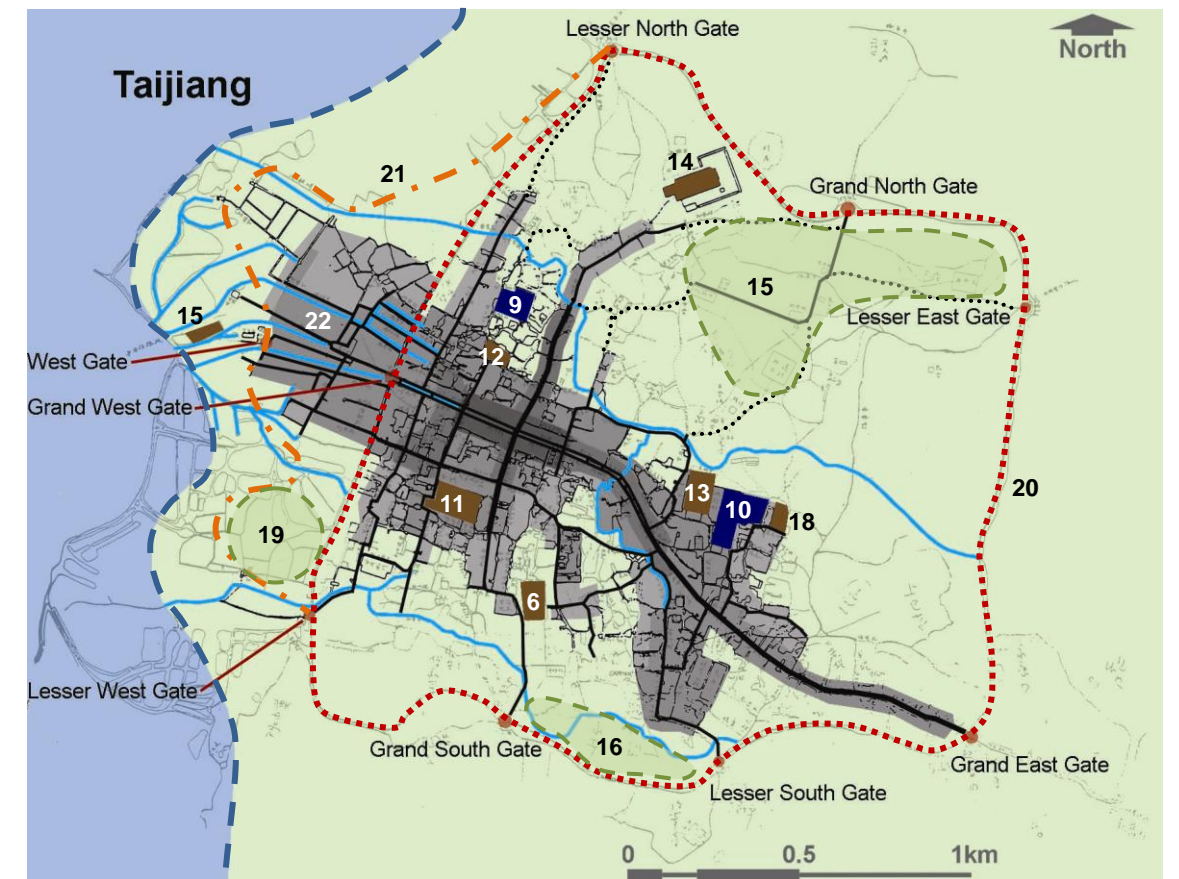
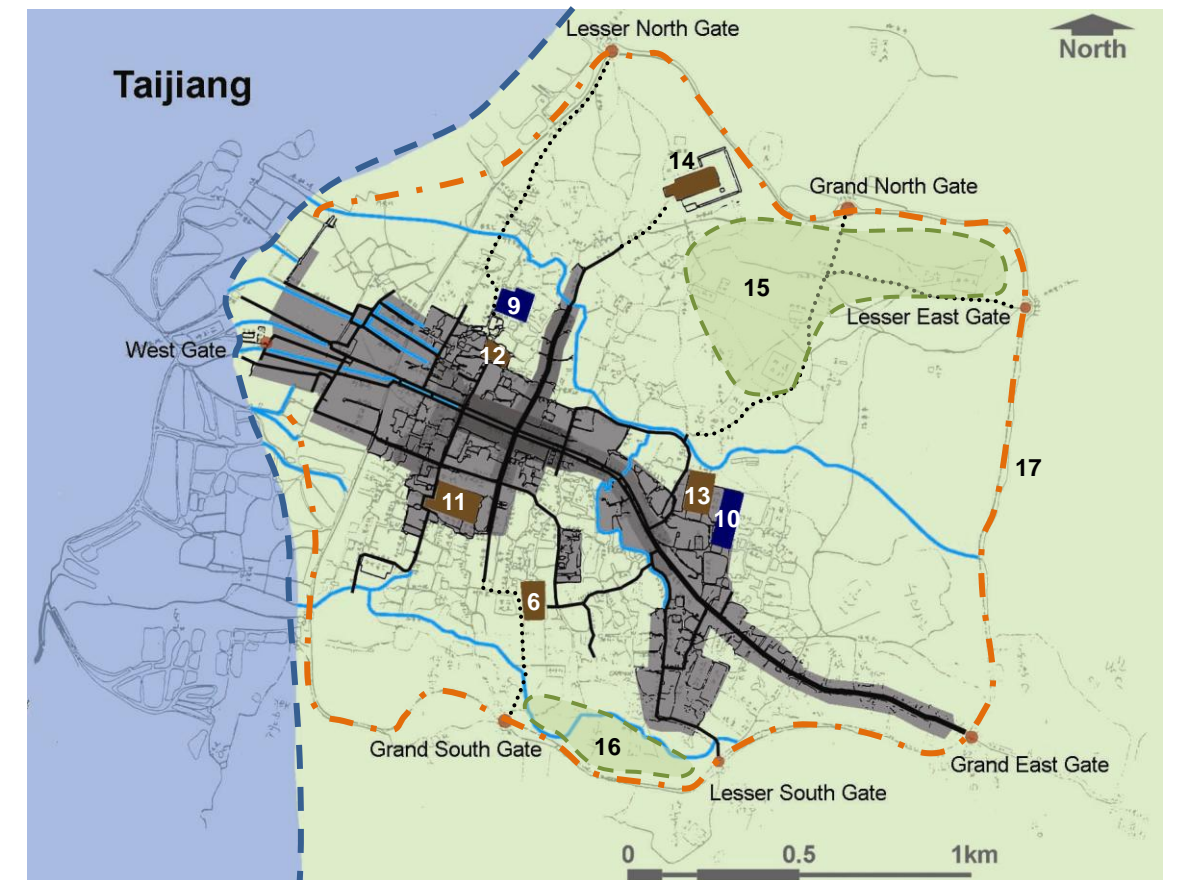


A3: Tainan in 1752 (top right)

- 9 Taiwan County Hall
- 10 Taiwan Fu City Hall
- 11 Taiwan Defence Agency
- 12 Chihkan Tower (monument)
- 13 Examination Hall
- 14 Army Headquarters
- 15 barracks
- 16 cemeteries
- 17 wooden city walls

A4: Tainan in 1807 (bottom right)

- 18 hospital
- 19 fish farms
- 20 pise city walls
- 21 wooden outer city walls
- 22 Five-Canal area



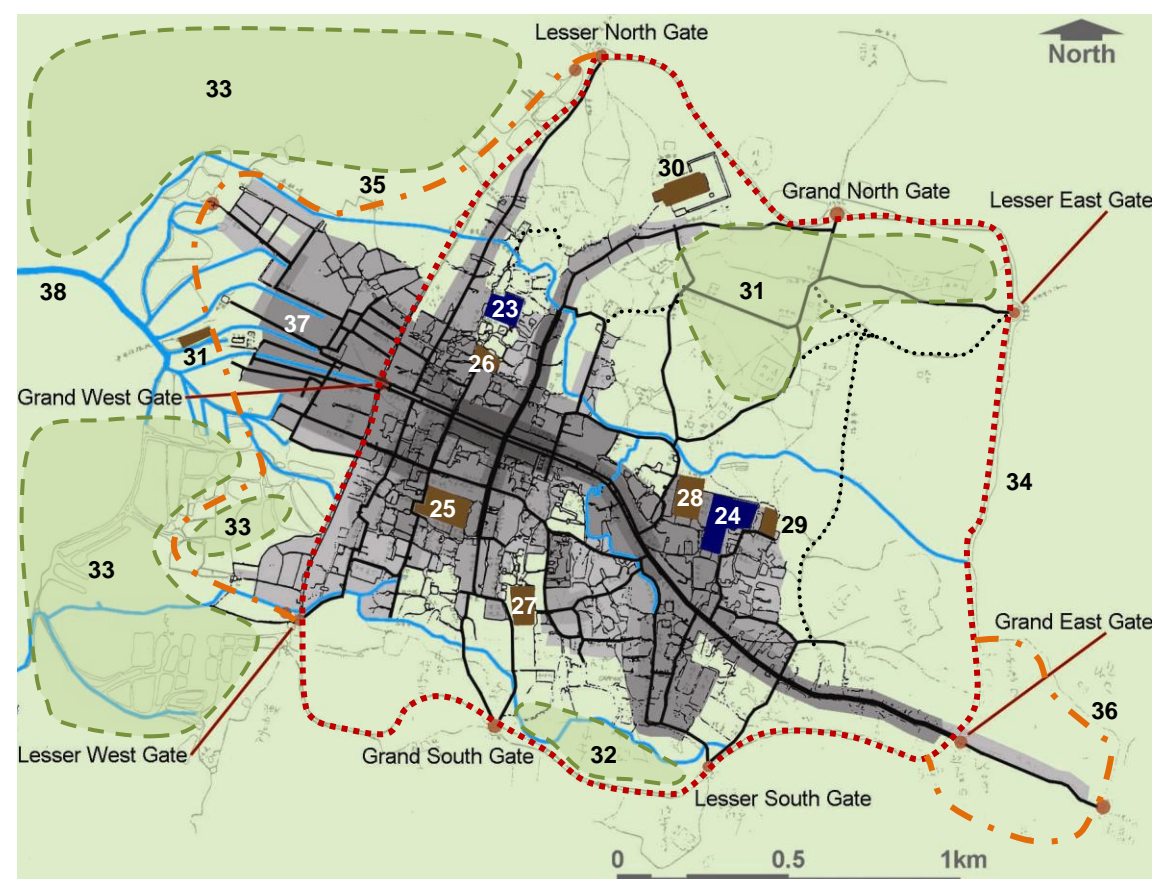


Figure B1-4

- areas developed in 1807-1875
- areas developed in 1875-1910
- areas developed in 1910-1945
- areas developed in 1945-2010
- government buildings
- main public buildings
- streets and alleys
- outskirts of the city
- major city walls
- secondary city walls
- water elements
- parks and gardens
- case-study blocks

B1: Tainan in 1875 (top left)

- 23 Taiwan County Hall
- 24 Taiwan Fu City Hall
- 25 Taiwan Defence Agency
- 26 Chihkan Tower
- 27 Confucius Temple
- 28 Examination Hall
- 29 hospital
- 30 Army Headquarters
- 31 barracks
- 32 cemeteries
- 33 fish farms
- 34 pise city walls
- 35 brick west outer city walls
- 36 wooden east outer city walls
- 37 Five-Canal area
- 38 Old Canal

B2: Tainan in 1910 (bottom left)

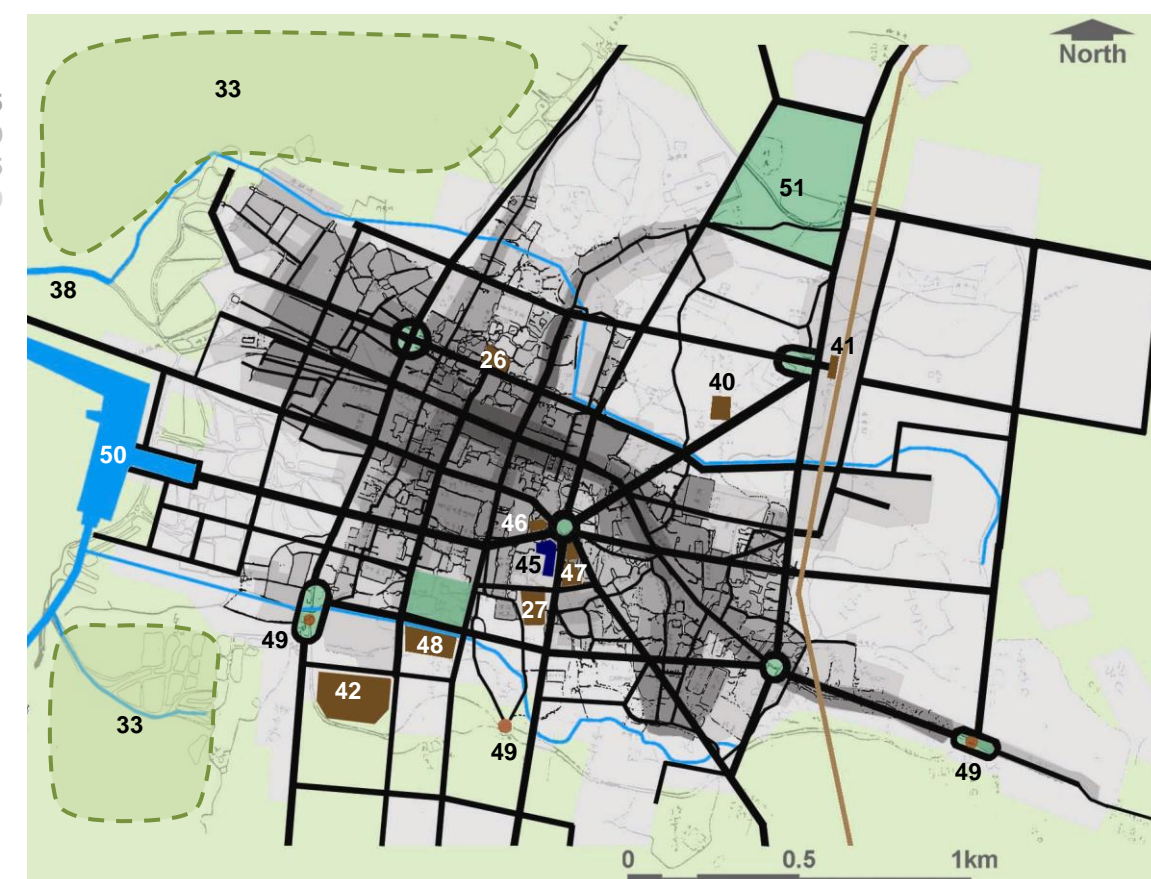
- 39 Tainan County Hall
- 40 Tainan Hospital
- 41 Tainan Railway Station
- 42 prison
- 43 rails
- 44 light-rails

B3: Tainan in 1945 (top right)

- 45 Tainan City Hall
- 46 fire station
- 47 Tainan City Police Bureau
- 48 Tainan District Court
- 49 remains of city gates
- 50 Tainan Canal
- 51 Tainan Park

B4: Tainan in 2010 (bottom right)

- 52 museums
- 53 blocks of case studies



URBAN BLOCKS: THE TRANSFORMATION OF EVERYDAY SPACES IN TAINAN

With a focus on three case studies, this chapter will examine the typomorphological aspects of everyday spaces in Tainan. This exploration will establish some of the background to the emergence of what, I shall suggest at the end of the thesis, is a unique heterotopic urban condition, and will also lay the groundwork for the empirical observations of everyday life.

Before the exploration, I should explain the selection of the case-study urban blocks. The selected case-study blocks help focus the morphological understanding of the city, but also serve as sites for the empirical observation of contemporary everyday appropriations of space. More importantly, these explorations will be examined, based on the Versailles typomorphological approach, to see the interaction between the material typological transformations and particular social practices. In this case, the selection must consider the issues of both typology and social practice in the blocks.

In order to allow a comparative discussion about the spatial and social issues in the pre-modern living spaces and in the modern urban blocks of central Tainan, the case-study blocks must be located in the area which had been densely developed before the colonial modernization implemented by the Japanese. The blocks that satisfy this condition are identifiable in Figure B4 (p.189) and are shaded (both darker and lighter grey areas) in Figure 7.1.

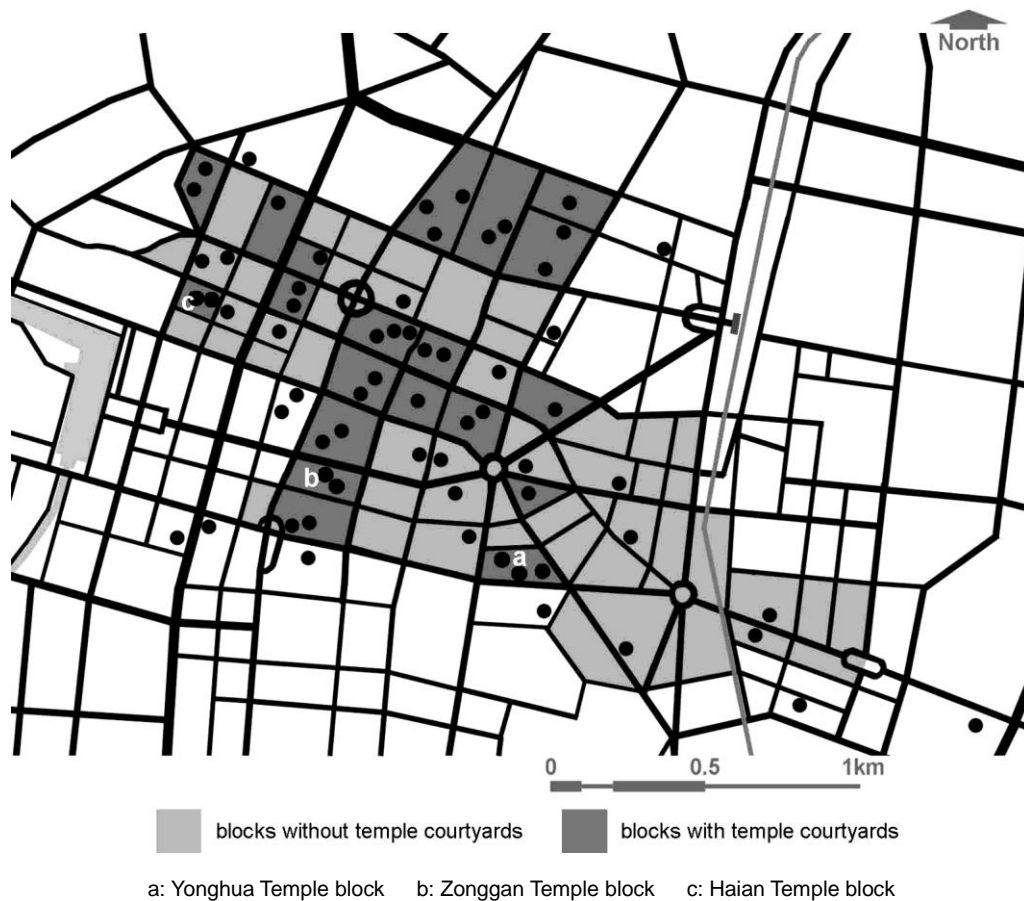


Figure 7.1 Urban blocks of Tainan in the area which had been densely developed in the 19th century and the distribution of historic temples (edited from Figure B4, p.189)

As can be seen in Figure 7.1, historic temples (marked by dots) are scattered in a consistent density across central Tainan. Most of the shaded blocks in this diagram contain one or more historic temples. It is important to know that there is often a courtyard space in front of an historic temple. In typological terms, a courtyard space is always the most crucial element of the surrounding urban tissue. As Chapter 3 explored, the courtyard housing fabrics of Milan and Rome (Figure 3.9, p.57), Hampstead Garden Suburb's cul-de-sac courtyard spaces (Figure 3.20, p.74) and the courtyard blocks of Berlage's project in Amsterdam (Figure 3.21, p.75) all consider the courtyard space to be the most significant element of their urban tissue typologies. Thus, these central Tainan urban blocks can be divided into two major types based on whether the block contains a temple courtyard or not. The

block typology without a temple courtyard includes two major categories: the blocks containing no temples, and the blocks containing temples but not courtyard, usually a consequence of having been destroyed in the reformation of the block under the Japanese modern planning regime. Both categories are shaded in lighter grey in Figure 7.1. As the temples in the latter category of this block type are mostly located in the perimeter of a block, without a courtyard, the temple is just part of the perimeter public elements of a block. The opposition between centre and perimeter, private and public in a block of this type appears to be very clear. Another block typology is represented by blocks with temple courtyard spaces remaining in their interior as part of the labyrinthine alley fabric. Due to the courtyard morphology, the private neighbourhood spaces in the centre of such a block are blended with public functions. This is where the heterotopic urban condition sprouts and the temple courtyard, the centre of the neighbourhood's social interaction, is therefore considered as the key place for everyday life observation.

In an urban block of this courtyard typology, the temple continues its pre-modern social function. Before the colonial modernization, temples were always the social cores for the neighbourhoods in the city, and the community concept of *jing*, as described in Chapter 6, was a united domain of several temples. Although the concept of *jing* is no longer influential in today's everyday life-style (today's *jing* remains only as a religious principle), the temples, especially those with a courtyard space, are still important social cores for the contemporary city centre's everyday life. This is because a temple courtyard often provides various irreplaceable social functions including, as Wei suggested, religious practices, leisure, assembly, commerce, traffic, political and civic functions (1998: 2.13-2.14). Some courtyards may have shops or cafés and become relatively commercial, while others may have more local neighbourhood activities. Each courtyard space appears to be slightly different in terms of everyday appropriation. More importantly, for social practice in the labyrinthine alley fabric, the courtyard space can provide a visual release as well as orientation and tranquillity (Wei 1998: 2.14). In

this case, as a social core of the city, a properly preserved temple courtyard of today can still dominate the surrounding labyrinthine alley fabric and the everyday social practice just as it did in pre-modern Tainan, and this condition has formed a tension with the social practice influenced by conditions of social alienation – the fragmented (enclave) and oppositional (centre and perimeter) concepts of a block. Since the blocks of this courtyard typology provide the social cores of central Tainan and tend to maintain the temple's pre-modern social function, the case-study blocks will be selected from the blocks of this type so as to enable us to understand the transformation of social practices in relationship to the historical fabric of the city.

The blocks with temple courtyards that can, on this criterion, be selected for case studies are shaded in darker grey in Figure 7.1. Some of these temples are popular with visitors for both religious and touristic purposes, especially those located around the oldest fabric of the city centre. This has meant that the social practices in these temple courtyards are complicated, and as a result they have not been considered for this research. In other words, for case studies, this thesis has only considered the blocks with a set of social practices that is closely related to the local routinized everyday life. Therefore, the selected case-study blocks are the blocks of the Yonghua Temple, the Zonggan Temple and the Haian Temple, as shown in Figures B4 (p.189) and 7.1. Their pre-modern (1875) and contemporary (2010) forms are represented in Figures C, D and E (at the end of this chapter, pp.218-220). The subsequent case-study explorations (Sections 7.2, 7.3, and 7.4) will emphasize the morphological and historical social backgrounds of these blocks and their surrounding areas with comparative examinations of their pre-modern and contemporary morphological characteristics, while the everyday social practice of today in these blocks will be the major concern of the next chapter.

7.1 COMPOSITION OF AN URBAN BLOCK

Before exploring the case-study urban blocks, I shall elaborate the general condition of urban blocks in contemporary central Tainan. This elaboration will focus on the occupation and land ownership so as to understand the composition of an urban block in central Tainan.

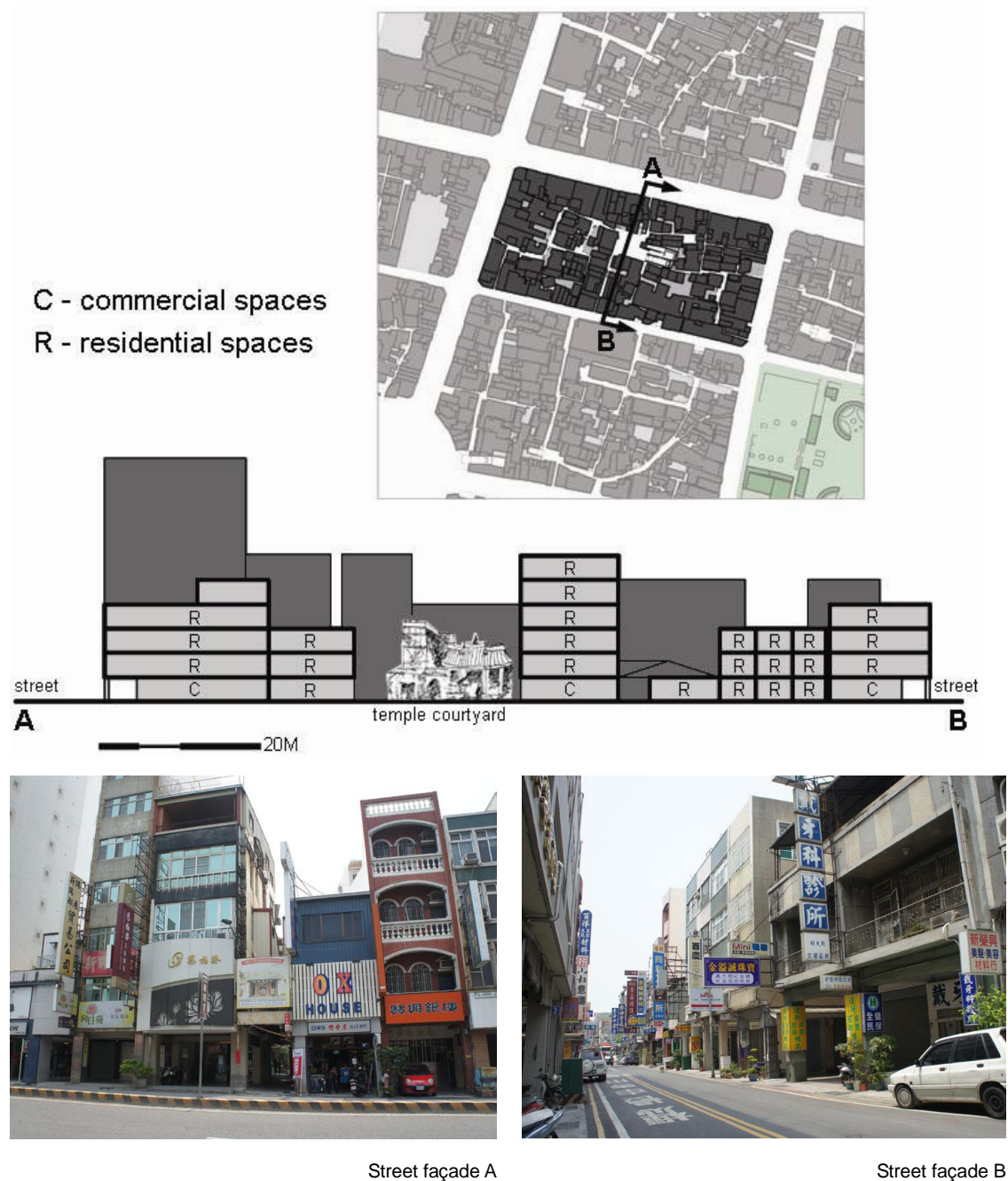


Figure 7.2 Section of Zonggan Temple Urban Block

Occupation of an Urban Block

In general, the exterior of an urban block in central Tainan is occupied by commercial spaces and the interior is mainly residential. The use of exterior the space of the block follows a pattern that is typical in many parts of Asia. In traditional Asian cities, buildings on the edge of an urban block are, functionally speaking, normally mixed use, with commercial spaces on lower levels and residential spaces on higher levels (Figure 7.2). The most distinct feature of the buildings on the exterior of an urban block is the covered pedestrian areas called *ding-a-ka* (Figures 7.2 and 7.3). *Ding-a-ka*, translated from Chinese Fukien, is also understood as *qilou* (Chinese Mandarin), or ‘five foot way’ in Singapore and Malaysia. In Taiwan, these are multi-use spaces that encompass commercial functions, motorbike parking and pedestrian traffic, as shown in Figures 7.2 and 7.3.



Figure 7.3 Ding-a-ka spaces

The inside of an urban block in Tainan is mainly residential. Since these blocks are very large, the inside of the block is not just formed by the rear parts of the buildings, but is also ‘wrapped’ by an external façade that faces outwards towards the more public streets. In this respect, the block brings together both pre-colonial and colonial urban systems. As Figure 7.2 illustrated, the buildings in the

interior of an urban block are at once separate from, and co-constituted by, the commercial spaces on the edge of the block. They can only be accessed from the alleys or the temple courtyard sides, but in a more general sense are formed by the buildings around the edge.

Land Ownership

The condition of land ownership in Tainan has played an important role in the process of urban transformation and in the practice of urban conservation in that city. The land ownership structure in central Tainan is founded on the land developed before the Japanese colonization. Since these plots of land have very long histories, repeated transfer of ownership and division of the land through many generations have complicated the ownership rights. The interaction between inherited and commercial land transfer has further complicated the ownership (Lu 2005: 2.4; Lu 2007: 5.27). In the land use study conducted by Lu (2007), in central Tainan, a 100-square-metre plot of land with a relatively low density (consisting mainly of two-storey buildings) is owned by 61 people, many of whom are probably unknown by each other. In addition, in the process of Japanese colonial urban reformation, an existing plot of land was often cut in two, further complicating the ownership status of the plot (Lu 2007: 5.1). For example, because of the grid street planning, once an existing plot of land was cut by a street, the land plots on the opposite side of the street were held by the same owners with various rights to sell. Such conditions have caused difficulty in reorganizing the land plots.

Since the condition of land ownership in central Tainan is very complicated, through these processes of urban renewal and regeneration, it is very hard to manage the administration of the lands, and to reach a compromise with the owners of each plot (Lu 2005: 2.4). This situation is considered to be one important factor in the survival of the pre-colonial urban fabric to the present day. As Lu indicates, 'Since the urban land readjustment scheme was implemented in Tainan in 1969... the older city centre

areas were rarely considered in the readjustment projects because the practices of land transfer, division and consolidation were extremely difficult. In the city centre area, the ownership of a land plot was often shared by a large number of people and the rights were complicated... thus the idea of land readjustment [in central Tainan] was difficult to be achieved' (Lu 2007: 4.8).¹ While the issue of land ownership is a significant factor in the urban history of central Tainan, and will be part of any urban conservation policy, this thesis will focus on the more narrowly described morphological aspects, as set out above.

7.2 THE MORPHOLOGY OF THE YONGHUA TEMPLE URBAN BLOCK

The location of the Yonghua Temple urban block is near the Confucius Temple and Minsheng Green Park Circus (the central circus planned by the Japanese). As Figure C2 (p.218) shows, Yonghua Temple (1), Dehua Temple (2) and Magong Temple (3) are contained in this block. The courtyard space of Yonghua Temple (1) is relatively well preserved inside the block and performs well as the social core of the everyday life in the interior of this block. The historical transformation of spatial and social structure in this area, with emphasis on the pre-modern and contemporary morphology, will be the major concern in the subsequent exploration.

Yonghua Temple and Its Surroundings in Pre-Modern Tainan

As can be seen in Figure C1 (p.218), in 1875, near the end of the pre-modern period, Yonghua Temple (1) was not located where it is today, but rather in a relatively undeveloped area to the south of the

¹ This description is in my translation. Original texts: 台南市地重劃從 1969 年開始... 在舊都市地區極少設置重劃區，原因多為土地交換分合極為困難。在土地權屬人數眾多，土地權利複雜的市中心區... 市地重劃部分難以實現。

neighbourhood around its modern location (the temple was relocated in the Japanese Colonial Period). As the internal structure of the 19th century Yonghua Temple is unascertainable, it is signified by a rough shape in the diagram. We can see that the area around today's Yonghua Temple block had been densely developed by 1875. The east and north parts of this area adjoined Main Street, the main east-west axis of Tainan in the Qing period, and this area was also the place which anyone moving from Taiwan Fu City Hall to the Confucius Temple must pass through. The following exploration of pre-modern morphological changes of the area around Yonghua Temple will examine this area's urban fabric and social background from the Koxinga period to the late 19th century, so that we can understand the historic value and significance of the remaining urban elements in today's fabric of the same area.

Yonghua Temple and its surrounding areas in the Koxinga period (1661-1683)

As can be seen in Figure A2 (Chapter 6, p.188), the densely developed areas in the Koxinga period were mainly situated around the cross-axes of the city. So the area we are exploring was conceivably rather wild at that time. But in this wild area, Yonghua Temple (it was Fengshan Temple in the Koxinga period), Magong Temple and Confucius Temple (1, 3 and 5 in Figure C1, p.218) already existed, as these temples were established in the 1660s. Since in the Koxinga period there were no streets in this area recorded in literature or maps, these temples were probably connected with the main living areas of the cross-axes by country paths. It is important to be aware that the scale of the Confucius Temple is much larger than any other temples in our case-study exploration. This temple, as can be seen in Figure C1 (p.218), has an organized walled area containing a group of buildings and courtyards, and thus it cannot form the courtyard block typology with which this thesis is concerned.

In the Koxinga period, although there were probably no residents in the area we are exploring, there was a daily farmers' market, as indicated in Figure A2 (Chapter 6, p.188), on an open area of ground

adjoining the south side of the Confucius Temple. But with the rapid development of the city in the early 18th century, the farmers tended to sell their products in city centre shops, and as a result this farmers' market had disappeared by 1720 (Chen 1993 [1720]).

Yonghua Temple and its surrounding areas in the 18th century

As Figures A3 and A4 (Chapter 6, p.188) show, some streets and buildings emerged in the 18th century in the area around where today's Yonghua Temple block is located. These developments are emphasized in Figure 7.4 (the brighter areas), including areas A and B, connected by street (a). As there is no accurate 18th century morphological information on the territories of areas A and B, their boundaries as drawn in the diagram are my conjecture based on the study of Pei-Hua Chung (2006) of the history of Thiau-a-hang Street (street (b) in Figure 7.4) and of Bi-Chang Wang's drawing of 18th century Tainan (Figure 5.4, p.125).

As can be seen in Figure 7.4, apart from the temples (1, 3 and 5) developed in the Koxinga period, in the 18th century Longwang Temple (6) and Madam Linshui Temple (4) were also established. Both of these temples were founded in the early 18th century. Longwang Temple was destroyed in the Japanese Colonial Period and as its former structure is unascertainable, it is represented only by a rough shape in the diagram. As can be seen in this diagram, there was a densely developed section in area A to the east of the Confucius Temple around street (b). It is inferred that this was the main place for selling timber and bamboo building materials in 18th century Tainan (Chung 2006: 2.22; Hsiao 1990: 77).



Figure 7.4 Yonghua Temple and the surrounding area in the 18th century (edited from Figure C1)

Also in Figure 7.4, area B is another developed area near Yonghua Temple in the 18th century. As can be seen in Figures A3 and A4 (Chapter 6, p.188), this area was a large developed accretion located between Taiwan Fu City Hall and the Lesser South Gate. In Figure 7.4, the neighbourhood network of area B included Magong Temple (3) and Madam Linshui Temple (4) at that time. Moreover, the street (a) connecting this area with area A was an important circulation route for people moving from Taiwan Fu City Hall to the Confucius Temple. As the government officials of a local authority in the

Qing period had to attend the annual memorial ceremonies of the Confucius Temple, this circulation along streets (a) and (b) would have been the route which the officials of Taiwan Fu City Hall took to move to the Confucius Temple for the events (Chung 2006: 2.14). The fact that the main entrance of the Confucius Temple was shifted to the temple's east side at the end of street (b) in the Qing period from the front of the temple (it was on the temple's south side in the Koxinga period) may explain the significance of this street at that time.

Yonghua Temple and its surrounding areas in the 19th century

The estimated built fabric of Yonghua Temple and its surrounding areas in 1875 is shown in Figure C1 (p.218). As can be understood from the exploration above, part of the area around today's Yonghua Temple block in the 19th century (Figure C1, p.218) was the place for selling building materials in the 18th century, while the other part was developed as a result of the expansions in the 18th century of areas A and B on Figure 7.4. As the fabric in the latter part of this area was formed by the peripheral expansions of two different areas, it appears to be relatively disordered. The logic of building plot organization in the axial growth process of pre-modern Tainan explained in Chapter 6 cannot be found in this area. Such disordered fabric might have developed based on the country paths connecting the temples with the city centre in the early period of the city's history.

In Figure C1 (p.218), we can see that the area around the location of the 19th century Yonghua Temple (1) was still relatively undeveloped. Possibly because there was a tract of cemeteries behind Yonghua Temple in the Qing period (see Figures A3, A4 and B1, pp.188-189), the spread of neighbourhood development towards this direction was considered undesirable.

As for the structure of the urban tissue, the temple courtyard spaces appeared to have been intimately integrated with the street and alley fabric and became part of the pedestrian and commercial traffic

flow network. In addition, temple courtyards were probably the most important open spaces for neighbourhood activities in the 19th century, as in the city at that time there were no other open spaces such as parks, gardens or squares which can be found.

The Yonghua Temple Block and Its Surroundings in Modern Tainan

Due to the urban reformation in the Japanese Colonial Period, the 19th century residential neighbourhood fabric of Tainan was cut through by planned streets. Blocks become significant elements of this new urban structure. The subsequent section in this thesis will focus on the morphological changes of the Yonghua Temple block and its surroundings in modern Tainan.

The Yonghua Temple block and its surrounding areas in the Japanese Colonial Period (1895-1945)

As can be seen in Figure B3 (Chapter 6, p.189), today's Yonghua Temple block and the nearby block on the north side were not separated and were still part of the same block by 1945. When comparing Figures B3 (Tainan in 1945) and B4 (Tainan in 2010), we can find that many of today's secondary planned streets in the areas around the Yonghua Temple block were not yet developed in the Japanese Colonial Period; for example, the nearby block on the east side of the Yonghua Temple block was also not subdivided yet in Figure B3 (p.189), but had become many smaller blocks in Figure B4 (p.189).

Apart from the street development, some other major changes occurred to the urban structure of Tainan in the Japanese Colonial Period. As Figure C2 (p.218) shows, Mingseng Green Park Circus, the central circus in the Japanese city plan, was established to the north of the Yonghua Temple block. Tainan City Hall (today's Museum of Taiwanese Literature, 6 in Figure C2, p.218), the City Police Bureau (7), a fire station (on the other side of the circus, not shown on Figure C2 (p.218) but can be found on Figure B3, p.189) and a museum (next to the City Police Bureau) were located around the

circus to make this circus the central hub of the city. At that time, Longwang Temple (6 in Figure C1, p.218) was pulled down to make way for the development of the Police Bureau. The street which developed on the west side of the Yonghua Temple block changed the manner of the connection between the Confucius Temple and the traditional neighbourhoods. The relatively undeveloped area in the 19th century (Figure C1, p.218) to the south of the area around today's Yonghua Temple block was developed as a block for Taiwan Bank (9) and its staff quarters (the houses to the west and southwest of Taiwan Bank in the same block). Yonghua Temple was demolished at that time and rebuilt in its current location.

The Yonghua Temple block and its surrounding areas in postcolonial Tainan

Most of significant morphological changes in the postcolonial period occurred during the period 1980-1995 (see Chapter 6). At that time, many large blocks were subdivided to increase the value of land and to improve the traffic flow. The street between the Yonghua Temple block and the nearby block on the north side in Figure C2 (p.218) was developed in 1994 for this purpose. The urban fabric of this area today, shown in Figure C2 (p.218), was substantially formed after this street development.

Comparative Examination of Morphological Changes in the Yonghua Temple Block

After exploring the historical transformation and social background of the Yonghua Temple block and its surrounding areas, we can find some interesting morphological characteristics in this area by comparing Figures C1 and C2 (p.218). First, the alley fabric developed in the 19th century is still clearly preserved in the blocks today, and these alleys can still form a coherent network from one block to another. This character of a continuing labyrinthine alley network running around the blocks is unique and it could be overlooked if our study only focused on one single block. Second, as for the building plots, apart from some plots on the perimeter of a block that were reorganized to front onto

the planned street, the plot grain, especially those in the centre of a block, was almost the same consistency as it was in the 19th century. By contrast, we can see that the structures of the Yonghua Temple block and the nearby block on its south side are very different. Since, as can be seen in Figure C1 (p.218), the area to the south of the area around today's Yonghua Temple block was relatively undeveloped, the contemporary fabric of the block in this area (the Taiwan Bank block) appears to be relatively organized. This shows the structural difference between the blocks with Qing fabric and the modern planned blocks.

What is more, according to Figures C1 and C2 (p.218), we can see that the relationships between many temple courtyards and their surrounding fabrics were changed due to the urban reformation. Some of the temple courtyard spaces were destroyed by newly planned streets; the Dehua Temple (2) is an example of this condition. A temple of this kind became a simple religious space, and had less connection with local everyday social practice. Some temple courtyard spaces remained in tact but the social networks formed by these courtyards and their surrounding alley fabric were broken; Magong Temple (3) and Madam Linshui Temple (4) serve as examples of this condition. Although Yonghua Temple (1) was newly developed in that location, it was characterized by pre-modern temple courtyard morphology. Thus, it appeared to remain functioning as the social core of contemporary everyday life in the block.

7.3 THE MORPHOLOGY OF THE ZONGGAN TEMPLE URBAN BLOCK

The courtyard space of Zonggan Temple (1) is shared with Wuwen Temple (7) today (see Figure D2, p.219). Since Zonggan Temple is one of the oldest temples in Taiwan, and Wuwen Temple was established more recently in the early 20th century, this courtyard has a deeper relationship with

Zonggan Temple in both morphological and social practical terms. This block is therefore usually called the Zonggan Temple block. The following exploration will be concerned with the morphology of this block and its surrounding areas in pre-modern and modern Tainan.

Zonggan Temple and Its Surroundings in Pre-Modern Tainan

By 1875 the surrounding areas of Zonggan Temple were already densely developed (see Figure D1, p.219). As Figures A3, A4 and B1 (Chapter 6, pp.188-189) show, this area can be viewed as the southward extension of the development around the Grand West Gate, the most bustling area of Tainan in the Qing period. In principle, the north-south straight street on the west side of the Taiwan Defence Agency (7) in Figure D1 (p.219) was one of the most important axes (matrix routes) of urban spread (see Chapter 6). Thus, the pre-modern development around Zonggan Temple appeared to be placed in between two parallel north-south structures: the city walls and the axis. The exploration which follows will focus on the morphological changes of this area in the period from Koxinga's rule to the late 19th century.

Zonggan Temple and its surrounding areas in the Koxinga period (1661-1683)

As can be seen in Figure A2 (Chapter 6, p.188), the area we are exploring was on the shore of the Taijiang lagoon in the Koxinga period. At that time, this area was desolate, but the Zonggan, Shatao and Lianghuang Temples (1, 3 and 6 in Figure D1, p.219) were already standing along the coastline on sites where they still are today. By the end of Koxinga's rule there was a row of temples built spread along the coastline of Tainan fronting westward towards the sea. These included (from the north to the south): the Founding Queen of Heaven Temple, Tainan Great Queen of Heaven Temple, Founding Martial Temple, Kaishan Temple, Shatao Temple, Zonggan Temple, Lianghuang Temple, and the

Kunsha Temple. Although the areas by the sea were relatively undeveloped in the Koxinga period, these temples had formed a very special coastal morphological character.²

Zonggan Temple and its surrounding areas in the 18th and 19th centuries

Apart from the temples built in the Koxinga period mentioned above, Baoxi Temple (4) and Guandi Temple (2) in Figure D1 (p.219) were established in the early 18th century and as a result this area already had many temples before any neighbourhood development began. As can be seen in Figure A3 (Chapter 6, p.188), in the mid 18th century, the developed area near Zonggan Temple was spread mainly around the north-south axis on the west side of the Taiwan Defence Agency. This development was typical of the axial growth pattern in pre-modern Tainan discussed in Chapter 6. But at that time none of the temples mentioned above were included in that developed area yet. So it can be assumed that the temples were connected to the more formal developed area along the axis with more informal country paths.

As can be seen in Figures A3 and A4 (Chapter 6, p.188), the developed area mentioned above in the late 18th century did not keep spreading southward along the axis, but rather started to fill the area between the axis and the west walls. The developed area around Zonggan Temple by the end of the 18th century is illustrated in Figure 7.5, and the axis is marked 'a'. The drawing of this diagram is based on the maps in Chou (2003), and the studies of Ke (1998) and Wu (2007). But we only know the rough scope of the developed area, and have no idea about its precise boundaries in the 18th century, so the edge of the developed area drawn in the diagram is just presumed roughly.

² This was possibly for ensuring safety for sailors, prosperity for traders or protection from attacking forces. However, the factual reasons are still in need of further research.



a: axis 1-6: temples (see Figure D1, p.219) 7: Taiwan Defence Agency 8: coast guard headquarters

Figure 7.5 Zonggan Temple and the surrounding area in the 18th century (edited from Figure D1)

The coastline at this point in the city had retreated slightly and the west walls were built in the 18th century, as mentioned in Chapter 6. Due to the coastline retreated, this area was no longer near the shore of the Taijiang lagoon and the temples built along the former coastline in the Koxinga period were now landlocked. As can be seen in Figure 7.5, the area had developed as a substantial urban accretion in the late 18th century and that embraced most of the temples built in the Koxinga period, including Zonggan Temple (1). The courtyards of these temples had been involved as part of the alley

network, and, being the most important open spaces, they served as the social cores of surrounding neighbourhoods. In addition, as we can see in Figure 7.5, the coast guard headquarters (8) was located to the south of the densely developed area. Due to the location of this institution, the Lianghuang Temple (6) was clearly still quite separate from the neighbourhood in the densely developed area by the end of the 18th century.

The development of Zonggan Temple and its surrounding areas by 1875 is shown in Figure D1 (p.219). We can see that the newly developed area in the 19th century just spread southward from the existing developed area over the area between the walls and the axis, but the spread was also limited by the walls and streams, respectively, on the west side and the south side. The area outside the west walls near the Lesser West Gate was a popular fish market at that time, surrounded by fish farms (Chan 2006: 112).

The Zonggan Temple Block and Its Surroundings in Modern Tainan

The area around Zonggan Temple was cut into by an ordered grid in the Japanese Colonial Period. In the urban structure that resulted, the Zonggan Temple and its courtyard space were well preserved in the centre of a block and, as a result, it could still serve as the social core of its surrounding neighbourhood. In addition, since the city walls were destroyed by the Japanese and, as Figure D2 (p.219) shows, replaced with Ximen Road (11), urban development in the early 20th century spread rapidly largely across the area outside the walls (as can be seen in Figure B3, p.189). The morphological change that took place after the formation of blocks will be explored further below.

The Zonggan Temple block and its surrounding areas in the Japanese Colonial Period (1895-1945)

The fabric of the area around Zonggan Temple formed by 1945 was already quite similar to what it is today (Figure D2, p.219). In the Japanese Colonial Period, there was a new street development connecting the central circus and Tainan Canal serving as the main axis of the city, as mentioned in Chapter 6. This street is today's Zhongzheng Road (10), shown in Figure D2 (p.219), on the north side of the Zonggan Temple block. Also, Ximen Road (11), the street developed on the line of the former west city walls with the light railway in the early Japanese Colonial Period, was located on the west side of the Zonggan Temple block. With two then very important streets around it, the area we are exploring was very bustling in the Japanese Colonial Period. Many of the most popular cinemas, theatres, restaurants, shops and large indoor markets emerged in this area at that time. Therefore, the role of living spaces around Zonggan Temple was changed from being primarily a residential area on the periphery of the walled city to the most prosperous commercial district of the city. The former landscape of fish farms located right outside the walls was also replaced by bustling street scenes.

In addition, the block to the southeast of the Zonggan Temple block, today's Park 11 (8) in Figure D2 (p.219), was developed as a public garden with a Japanese shrine in the Japanese Colonial Period. As can be found in Figure D1 (p.219), this place was relatively undeveloped by 1875. Then the home of Ju-Hsiang Wu, one of the richest Taiwanese entrepreneurs in the late 19th century, was built over this great tract of land, but was subsequently expropriated by the Japanese for the shrine. We can see that this modernist open space was developed on an enclave dominated by the grid structure. This morphological condition was very different from the traditional neighbourhood temple courtyard open spaces that were normally situated as coherent parts of the alley flow network.

The Zonggan Temple block and its surrounding areas in postcolonial Tainan

Basically there was little morphological change in the postcolonial period in the area around the Zonggan Temple block. This area, with its many traditional markets, conventional retailers and local

cafés, is still quite lively today. But when compared with the newly developed commercial districts after the 1990s, this area appears to be relatively old.

Comparative Examination of Morphological Changes in the Zonggan Temple Block

The morphological characteristics in the area around the Zonggan Temple block are similar to those we explored earlier in the Yonghua Temple block (see Figures D1 and D2, p.219). First, the labyrinthine alley network developed in the Qing period clearly structures both blocks and their surrounding contexts, and this can be seen today. Second, except for the building fabric on the perimeter of the blocks, most of the urban fabric in the centre of the blocks also remained roughly as it was in the 19th century. But the areas around the two blocks differ in interesting and significant ways. The street façades between Zonggan Temple block and the nearby blocks on its west side (located on the former location of fish farms outside the city walls) were developed with the same style in the Japanese Colonial Period under the urban reformation plan. But the structures and street façades between the Yonghua Temple block and the nearby block on its south side (the Taiwan Bank block) were very different. Evidently, the exploration of the morphological history of these blocks helps us to comprehend their morphological similarities and differences. This exploration also helps us to understand how the locations and orientations of many temples today were influenced by the former coastal geography.

7.4 THE MORPHOLOGY OF THE HAIAN TEMPLE URBAN BLOCK

The third case-study that I examine in Tainan is the urban block around the Haian Temple. This block is consistent with the others I have explored above in many ways, but also offers a set of

morphological features that are rather distinctive. First, surrounded by narrower secondary streets, this block is much smaller than the other two. Second, unlike the other two blocks, the alley fabric in this block is mainly derived from the canal fabric of the Qing period's Five-Canal area. Even so, there is certainly also a temple courtyard space well preserved in the centre of the block functioning as the social core of the neighbourhood. Its morphological history and social background in pre-modern and modern periods will be elaborated further in the exploration which follows.

Haian Temple and Its Surroundings in Pre-Modern Tainan

Apart from the temple itself, the area around today's Haian Temple block was rather undeveloped in 1875, near the end of pre-modern period (see Figure E, p.220). By contrast, the Five-Canal area to the east of Haian Temple was densely developed and the street system and plot organization of the area were fairly well ordered. The Five-Canal area, as explored in Chapter 6, was a significant trading-led commercial district of Tainan in the Qing period. The ordered street and plot structure of the area was closely influenced by the pragmatic demands of trading activities, as we shall see. Because the area around Haian Temple and Five-Canal was still in the Taijiang lagoon during the Koxinga period, the following exploration will start from the Qing period (the 18th and 19th centuries).

Haian Temple and its surrounding areas in the 18th century

The Haian (1), Fengshen (2), Xiluo (3) and Yaowang Temples (4) in Figure E1 (p.220) were established in the early to mid 18th century. The coastline of Tainan was situated around the line of brick outer city walls (see Figure A3, p.188; and 12 in Figure E1, p.220) at that time and thus these temples were in fact very close to the shore. Also, the Five-Canal area was already densely developed by the mid 18th century. Being the most important trading base of Taiwan in the 18th century, this area was occupied by many trading companies and warehouses. These commercial buildings formed an

ordered fabric in which a typological rule can be found. Each building plot in this area was in the shape of a long strip approximately 4.7 metres in width, which was one of the standard lengths of timber building material produced in Fujian (Wu 1997: 56). The typical section of a trading building is illustrated in Figure 7.6 and, as can be seen, the building is divided into two parts with a courtyard in the middle. The rear section of each building plot was occupied by a warehouse adjoining a canal for the convenience of loading goods (as we saw in Chapter 6, goods were transported from Five-Canal by small rafts or sampans to Luermen, an international port near Anping, to be transferred to large junks). The front building on each plot, facing a street, was used as an office for business purposes. As the buildings were densely developed side by side, a courtyard space was required in the middle of each plot to provide daylight and ventilation. The practice of this building concept formed a unique building typology of Five-Canal and gave rise to the rather organized fabric of this area. Since these buildings always adjoined a street in the front and a canal in the rear, as can be seen in Figure E1 (p.220), the streets and canals appeared to run alternately in parallel in the fabric at that time.

In the 18th century, the temples in the coastal area of Five-Canal including, in Figure E1 (p.220), Haian Temple (1), Fengshen Temple (2) and Xiluo Temple (3), were important to the traders and sailors spiritually. Located on the sandbank between Nanshi Canal (9) and Nanhe Canal (10) fronting the sea, the Haian Temple (1) also functioned as a lighthouse to guide the ships negotiating the coastline.³

³ See the brochure *海安宮沿革概略* (*Introduction to the History of Haian Temple*), edited and printed by the management committee of Haian Temple.

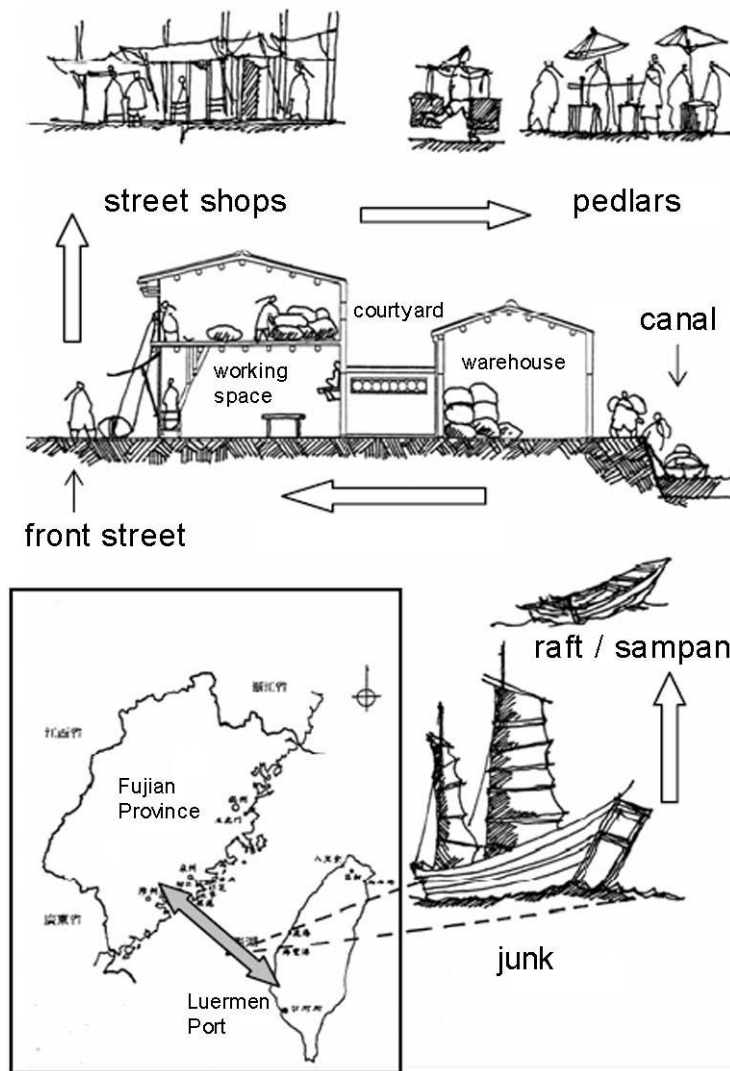


Figure 7.6 The Relationship between trading business, transport and building form of Five-Canal in the Qing period (Wu 2007: 168)

Haian Temple and its surrounding areas in the 19th century

The Taijiang lagoon was reclaimed in the early 19th century, and a new watercourse, the Old Canal, was developed to connect the Five-Canal area and the Luermen Port. As can be seen in Figure B1 (Chapter 6, p.189), the area on the former location of Taijiang was turned into fish farms in the 19th century. The Haian Temple and the other temples around this area were no longer near the sea, yet they were still important to the life of the Five-Canal area in social and spiritual terms. Due to the disappearance of the Taijiang lagoon and the northward shift of development focus in 19th century

Taiwan, the trading activity in the Five-Canal area was on the decline. As a result, there was hardly any new development in this area at that time compared with the 18th century. By 1875, the outer city walls (see 12 in Figure E1, p.220) were built, but the Haian Temple was still not surrounded by a densely developed neighbourhood.

The Haian Temple Block and Its Surroundings in Modern Tainan

Influenced by the 19th century canal system, today's urban fabric of the area around the Haian Temple (see Figure E2, p.220) was basically formed in the early 20th century. The blocks in this area are smaller, compared with the blocks in the other two case studies explored earlier (Yonghua and Zonggan). The Haian Temple and its courtyard are preserved in the centre of a block, but the shape of the courtyard was changed radically. The following exploration will describe the morphological changes of this area in the modern period.

The Haian Temple block and its surrounding areas in the Japanese Colonial Period (1895-1945)

The location of the Haian Temple was still around the edge of the city in the Japanese Colonial Period. The fabric of this area by 1920 was almost the same as it had been in 1875 (Figure E1, p.220).⁴ But by 1945, there were some planned streets developing. The block where Haian Temple is located was formed by the streets at that time and was almost four times larger than today's Haian Temple block, as the secondary streets had not yet been developed. To be precise, today's Haian Temple block and the nearby blocks on the south, southeast and east sides were not subdivided at that time. In addition, the primary school (6) to the west of Haian Temple block (see Figure E2, p.220) was established in this period, as one of the fringe belt elements explored in Chapter 6. The area beyond this school was still used as fish farms.

⁴ See Tainan's cadastral map of 1920 in Ke (1998: 123)

The Haian Temple block and its surrounding areas in postcolonial Tainan

Many new planned streets were developed in the period 1980-1995 in Tainan, as mentioned in Chapter 6. The secondary streets (see Figure E2, p.220) were established during that time. With rapid urban development, the fish farms had already been replaced by densely developed mixed-used districts. Apart from the grid street development, there were no significant urban elements, such as circuses, government buildings, markets or parks, embedded in this area. The living environment in this area is thus rather simple.

Comparative Examination of Morphological Changes in the Haian Temple Block

The greatest morphological difference between the Haian Temple block and the other two case-study blocks was the influence of the canal network on the making of today's alley fabric. As can be seen in Figure E1 (p.220), there was a spacious courtyard in front of Haian Temple (1) in the 19th century connecting with a small canal branch, and this canal branch has become a street, as Figure E2 (p.220) shows, leading to a cul-de-sac temple courtyard space. Moreover, the courtyards of the Fengshen (2) and Xiluo Temples (3) were two individual spaces connected by an alley (Figure E1, p.220), but they have become located on the opposite sides of a street (Figure E2, p.220). Although these two spaces are not well preserved in the centre of a block and cannot effectively serve as everyday social cores of their surrounding neighbourhood, the public space formed by these two spaces together with the street does in fact provide a greater place for events such as festivals and community and religious activities. As for the Yaowang Temple (4), the straight alley running from this temple into the Five-Canal area in Figure E1 (p.220) can still be found in Figure E2 (p.220), but the temple courtyard has disappeared. Because of the street development, the body of this temple was severed and redeveloped to its current

shape. More importantly, we can find that while the ordered plot fabric of the 19th century Five-Canal area was not conserved, it still has an influence on the orientation of today's urban fabric in this area.

Overall, through this exploration of the three case study locations in this chapter, we can gain some sense of the relationships between the pre-modern and modern fabrics of Tainan and the influences of 20th century street development on the structure of certain kinds of everyday spaces. Evidently, although the urban block is the most distinct element of the city today, the fabric developed in the pre-modern period is as significant as the structure planned by the Japanese in the contemporary urban form of Tainan. These morphological characteristics will be discussed further in Chapter 9, together with the findings of contemporary everyday social practice in these blocks which will be explored in the next chapter.

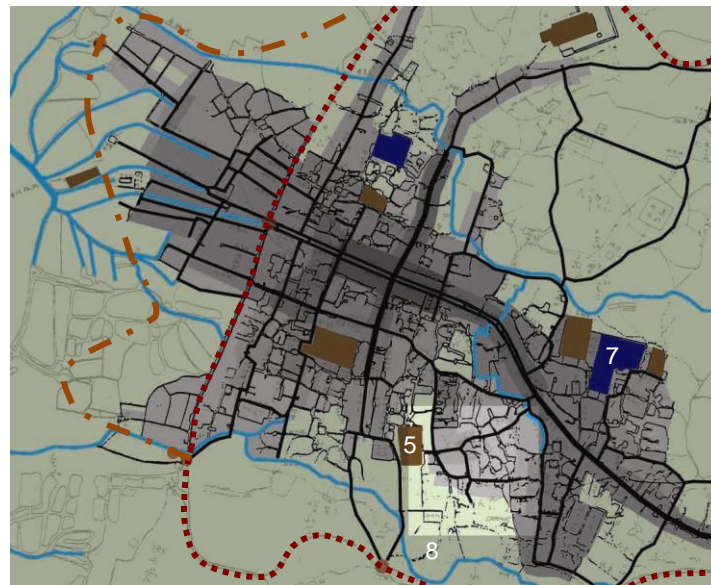


Figure C1
Estimated Built Fabric of Yonghua Temple and the Surrounding Area in 1875

- 1 Yonghua Temple (永華宮)
- 2 Dehua Temple (德化堂)
- 3 Magong Temple (馬公廟)
- 4 Madam Linshui Temple (臨水夫人媽廟)
- 5 Confucius Temple (孔廟)
- 6 Longwang Temple (龍王廟)
- 7 Taiwan Fu City Hall (台灣府署)
- 8 cemeteries



Figure C2
Built Fabric of Yonghua Temple Block and the Surrounding Area in 2010

- 1 Yonghua Temple (永華宮)
- 2 Dehua Temple (德化堂)
- 3 Magong Temple (馬公廟)
- 4 Madam Linshui Temple (臨水夫人媽廟)
- 5 Confucius Temple (孔廟)
- 6 National Museum of Taiwan Literature (台灣文學館) and National Centre for Research and Preservation of Cultural Properties (國立文化資產保存研究中心)
- 7 Tainan City Police Bureau (台南市警察局)
- 8 Zhongyi Elementary School (忠義國小)
- 9 Bank of Taiwan (台灣銀行)
- 10 Koxinga Shrine (延平郡王祠)

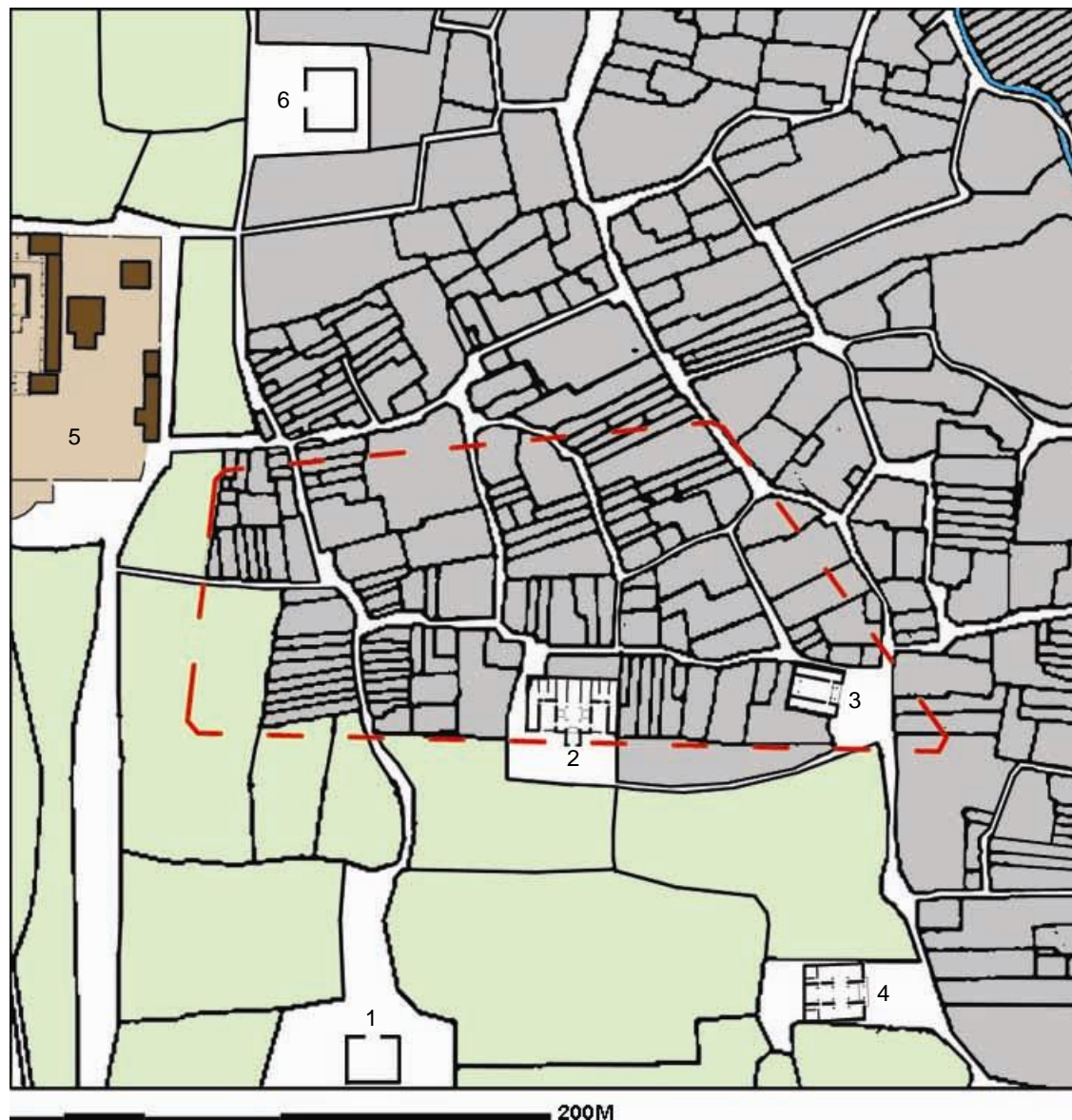




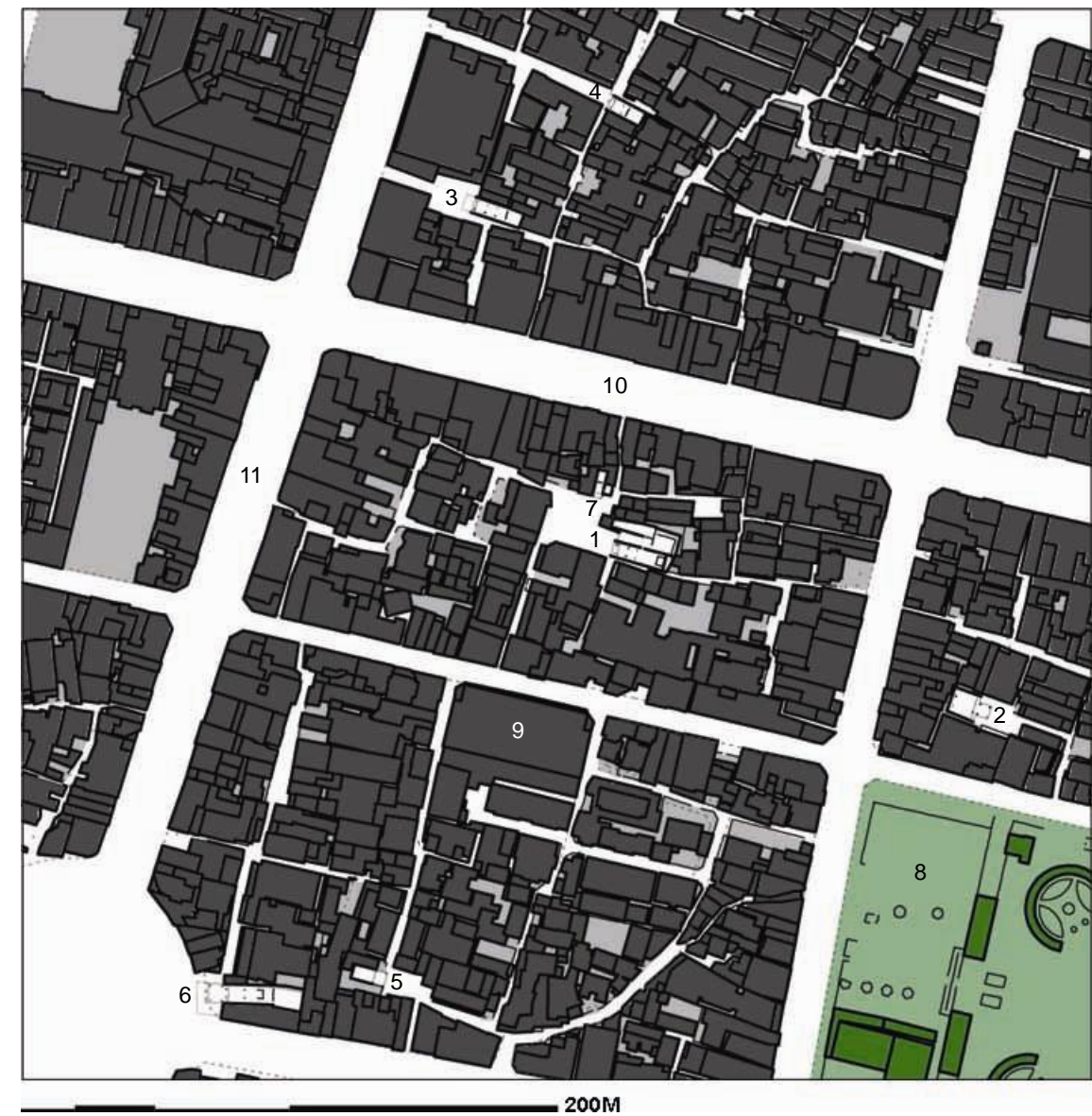
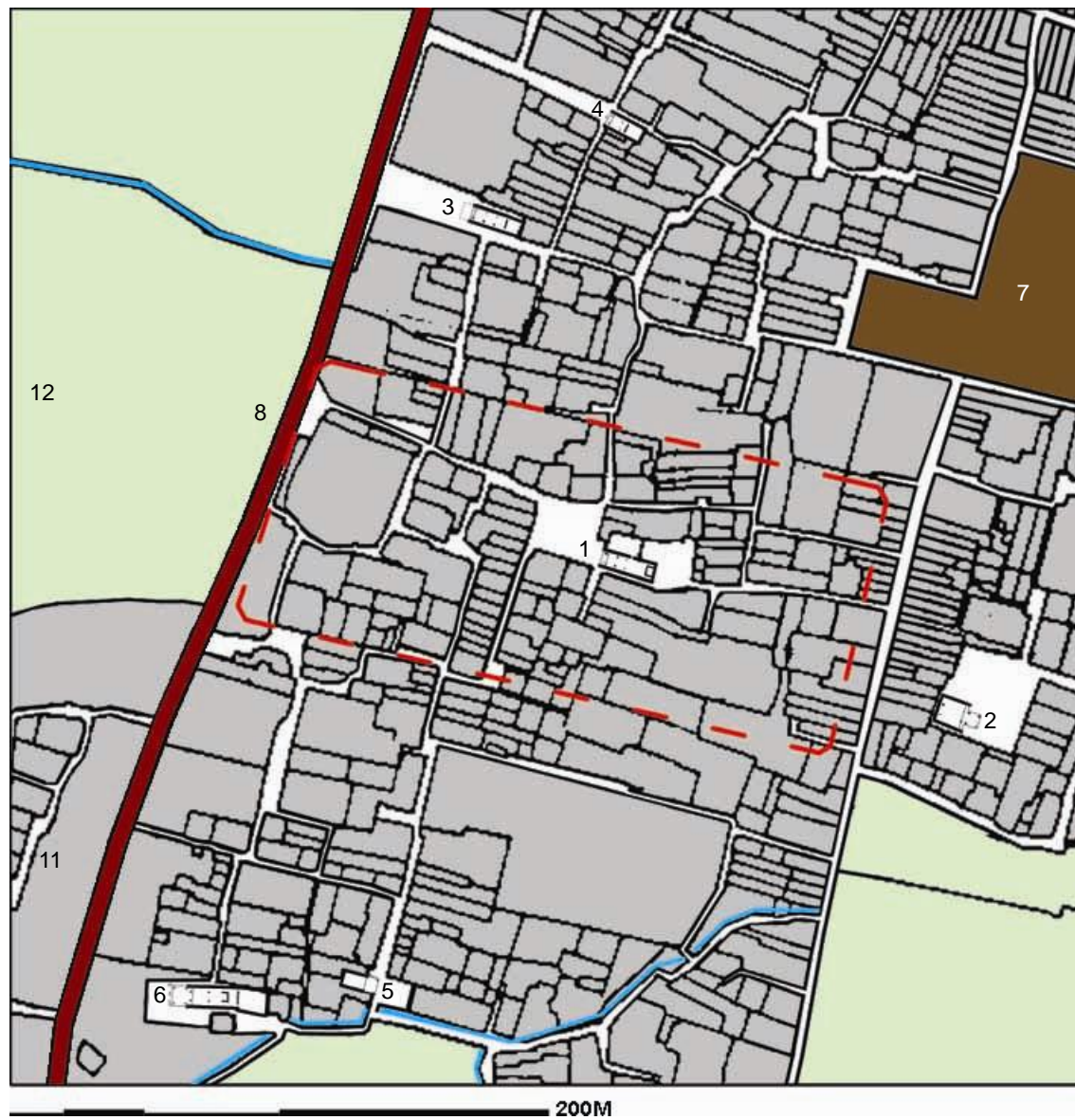
Figure D1
Estimated Built Fabric of Zonggan Temple and the Surrounding Area in 1875

- 1 Zonggan Temple (總趕宮)
- 2 Guandi Temple (關帝廳)
- 3 Shatao Temple (沙陶宮)
- 4 Baoxi Temple (保西宮)
- 5 Fuan Temple (福安宮)
- 6 Lianghuang Temple (良皇宮)
- 7 Taiwan Defence Agency (臺澎兵備道署)
- 8 pise city walls
- 9 Grand West Gate
- 10 Lesser West Gate
- 11 fish market
- 12 fish farms



Figure D2
Built Fabric of Zonggan Temple Block and the Surrounding Area in 2010

- 1 Zonggan Temple (總趕宮)
- 2 Guandi Temple (關帝廳)
- 3 Shatao Temple (沙陶宮)
- 4 Baoxi Temple (保西宮)
- 5 Fuan Temple (福安宮)
- 6 Lianghuang Temple (良皇宮)
- 7 Wuwen Temple (五瘟宮)
- 8 Park 11 (11 號公園)
- 9 Youai Market (友愛市場)
- 10 Zhongzheng Road (中正路)
- 11 Ximen Road (西門路)



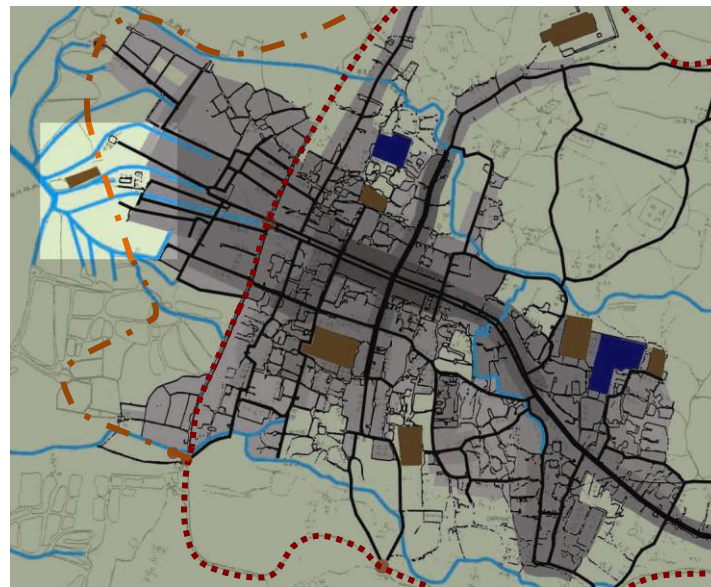


Figure E1
Estimated Built Fabric of Haian Temple and the Surrounding Area in 1875

- 1 Haian Temple (海安宮)
- 2 Fengshen Temple (風神廟)
- 3 Xiluo Temple (西羅殿)
- 4 Yaowang Temple (藥王廟)
- 5 Chongfu Temple (崇福宮)
- 6 Zhenhai Barracks (鎮海營)
- 7 Xingangqian Canal (新港墘港)
- 8 Fotou Canal (佛頭港)
- 9 Nanshi Canal (南勢港)
- 10 Nanhe Canal (南河港)
- 11 Anhai Canal (安海港)
- 12 brick outer city walls

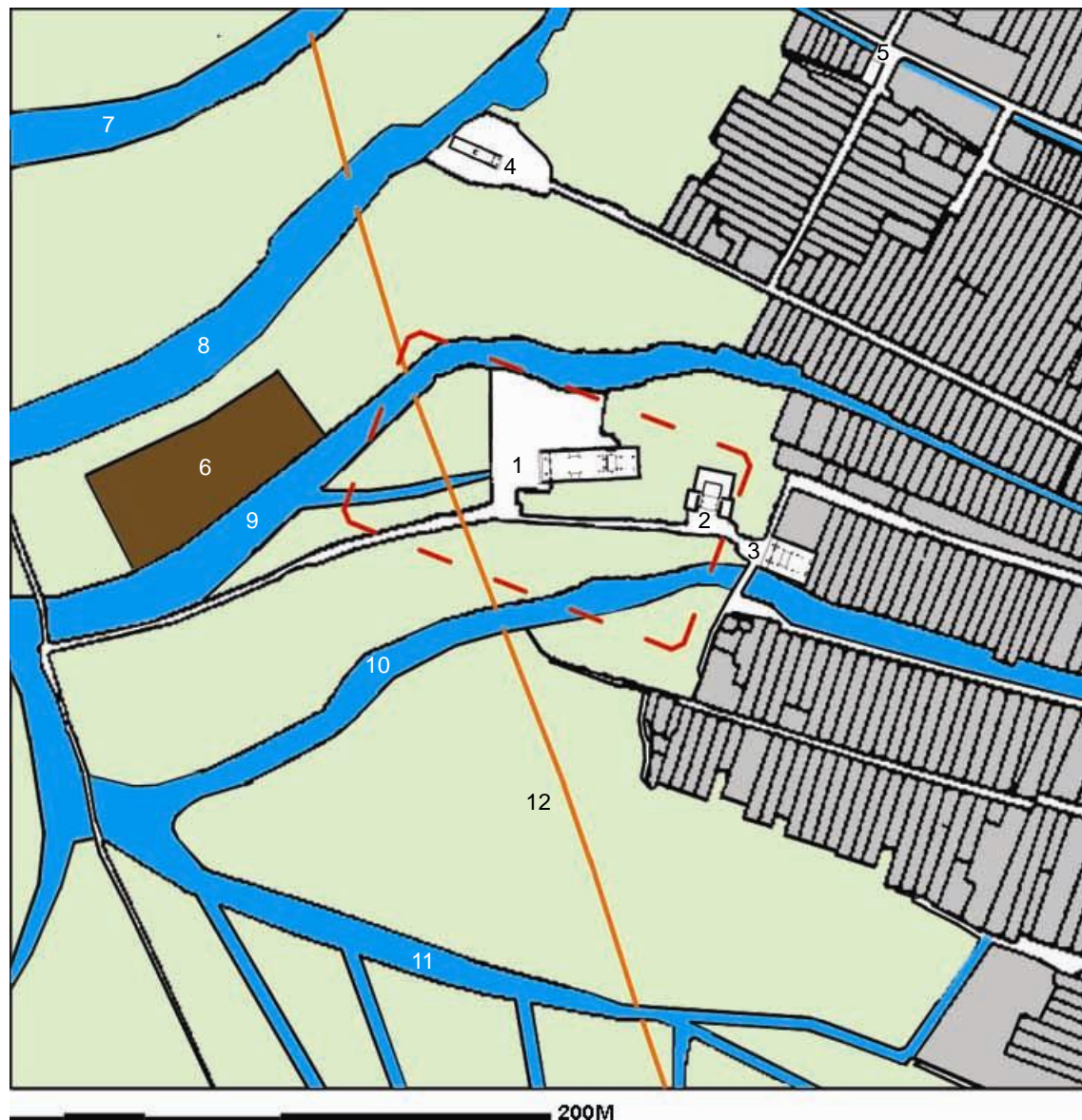


Figure E2
Built Fabric of Haian Temple Block and the Surrounding Area in 2010

- 1 Haian Temple (海安宮)
- 2 Fengshen Temple (風神廟)
- 3 Xiluo Temple (西羅殿)
- 4 Yaowang Temple (藥王廟)
- 5 Chongfu Temple (崇福宮)
- 6 Xiejin Elementary School (協進國小)



EMPIRICAL OBSERVATIONS OF EVERYDAY LIFE IN THE URBAN BLOCKS OF CENTRAL TAINAN

This chapter will explore the one day observations of spatial uses and appropriations of the Yonghua, Zonggan and Haian Temple courtyards, the three case-study urban blocks. The aim is to access something of the rhythm, content and patterns of everyday life in the historical city centre of Tainan. The observations take the form of annotated stills from video footage, based on a time-geography framework, and are represented in Figures F, G and H (pp.246-254). The methodology underpinning this documentation and representational technique, including a descriptive introduction to the surrounding environments of the three temple courtyards, can be found in Chapter 5. Selected snapshots with numerical codes in Figures F2 (p.247), G2 (p.250) and H2 (p.253) are displayed in the Appendix as data with a brief text description of the stories of the images.¹ Using these data and video materials, this chapter will start to explore the everyday life in the temple courtyards.

The explorations in this chapter will be divided into two sections. The first section (8.1) will be concerned with the general condition of everyday use and appropriation of the temple courtyards in relation to a selected 24-hour time period. These explorations will mainly rely upon the representations in Figures F, G and H (pp.246-254) because the analytical approach based on the framework of time-geography will allow better comparability of the event-time relationship between the spaces. Through a comparison of these representations, we can not only understand the routinized everyday uses and appropriations of these spaces, but also grasp the characteristics of certain social

¹ The everyday life study of this chapter will only examine the stories that are considered significant to this research. The Appendix allows consultation of the entire details of appropriation of all three temple courtyards and is useful for further studies.

practices in relation to the 24-hour time frame in each of the three temple courtyards. Some selected everyday narratives in the temple courtyards will then be discussed in the second section (8.2) so as to enable us to understand, in the making of the sense of place, what the most significant everyday events might be, and who the main actors are. As we shall see, the temple courtyards are not hyper-dense, super-busy, intense spaces, but in their everyday quietness and ordinariness they sustain a complex coexistence of many different interactions.

8.1 ONE DAY IN THE LIFE OF THE TEMPLE COURTYARD

In order to grasp the everyday use and appropriation of the case-study temple courtyard spaces, we need to understand how the spaces are used during a day in general. The 24-hour event-time maps of the three case-study temple courtyards represented at the end of this chapter (Figures F3, G3 and H3, pp.246-254) can be of help. In these diagrams, each captured human act is denoted by a dot. Then the activities in the three temple courtyards can be grouped into four major types. The first type is the most common one: the pedestrian and vehicular traffic passing through. Since the temple courtyard space serves as part of the alley circulation network, it is inevitable that some movements will be found from one alley to another across the courtyard without lingering. It is important to be aware that the level of traffic may influence the social relationship in the alleys (Appleyard 1981). Activities of this type are not shown with coloured blocks in the diagrams because, unlike the other types of activity that appeared to have specific relationships with time, these transit-type activities happen regularly – they can be found (most of the ungrouped scattered dots), more or less, in each set of five-minute footage throughout the day. The other three types are: ‘visiting surrounding facilities’, including the acts of visiting the temple and the other facilities on the sides of the temple courtyard, such as groceries, cafés and bars, and the activities in the courtyard relating to these visitors, such as

worshipping, dining at outdoor tables, waiting for take-away food and so on; ‘leisure and exchange’, including the activities of chatting, strolling, relaxation, exercise, children playing and so on; and ‘parking’, including parking cars and motorbikes in the courtyard for visiting somewhere nearby (for example to tenancies on the exterior of the block), but excluding parking for visiting surrounding facilities such as the temple, since this is included in the category of ‘visiting surrounding facilities’. Through these event-time maps, we can find the characteristics of the 24-hour time-specific fluxations in cultural appropriations of the three temple courtyard spaces during a typical weekday.

Before comparative examination, the 24-hour stories of each temple courtyard space in the event-time map will be briefly explored. In order to allow better comparability, the stories in each case will be grouped into four time-based sections (7:00-12:00; 13:00-18:00; 19:00-0:00; 1:00-6:00).

Use of the Yonghua Temple Courtyard

Section 1 (7:00-12:00)

The use of this temple courtyard during that morning was quite sparse. Before 11am, the only observable events were some movements of pedestrians and motorbikes in the alley passing through the courtyard, and a small number of people visiting the temple. Then at 12noon, the space was relatively more populated. Apart from some traffic moving across the courtyard, many people used the courtyard to park their motorbikes. According to my video observation (or see the snapshots with descriptions in the Appendix), during the lunch hour, people just parked their motorbikes successively on this courtyard and then walked to somewhere nearby for lunch because there were so many eating places around this area (see Figure 5.18, p.145). Thus in this courtyard, temporary parking is probably a regular event during the lunch hour on weekdays.

Section 2 (13:00-18:00)

As can be seen in the event-time map of Figure F3 (p.248), the appropriation of this temple courtyard during the hours of Section 2 had the greatest frequency and diversity of the day. The types of activity which occurred included not only passing-through movements, parking and temple visiting, but also leisure and exchange. Especially between 2pm and 3pm, a few small groups of people and individuals lingered in the courtyard to chat, talk on mobile phones, and relax. Then at 5pm, two ladies, one with a baby and another with a pram, leisurely strolled in the courtyard. At 6pm, there were two old men sitting on the doorway of the temple for a short chat. It appeared that during the afternoon this courtyard was quite frequently used for activities of leisure and exchange.

Section 3 (19:00-0:00)

Although at 7pm there were still a few people visiting the temple and the restaurant (Green House) on the courtyard side, the space patently quietened down soon after 8pm, even with occasional pass-through traffic. Then at 10pm, the time the workers at the temple, in surrounding facilities and at many nearby restaurants were getting off work, there was a slight increase in pass-through movements captured. Afterwards, the entire area fell silent.

Section 4 (1:00-6:00)

In this section of observation, nothing seemed to happen until a devout old man, a resident of the neighbourhood in the interior of this block, visited the temple at 5am, when the temple had just opened. Then this place lapsed into silence again.

Use of the Zonggan Temple Courtyard

Section 1 (7:00-12:00)

As can be seen in the event-time map of Figure G3 (p.251), we can find that most of the activities occurring during the hours of Section 1 in this temple courtyard were the movements of pass-through traffic, with a small number of people visiting the grocery on the courtyard side. As there are many alleys connecting this courtyard and the streets on all sides of the block (see Figure 5.20, p.149), the pass-through traffic in this courtyard appeared to be relatively frequent with diverse paths and directions.

Section 2 (13:00-18:00)

In the afternoon, apart from still a lot of pass-through traffic, this space was frequently used for social exchange. There were three old men leisurely standing outside Wuwen Temple (another temple on the courtyard side), two men sitting under the tree, three women lingering outside the grocery, respectively at 1pm, 4pm, and 5pm, for a chat.

The only parking activity captured during the day in this courtyard happened at 4pm and 5pm. At 4pm, a small van coming into this courtyard was parked in front of the seafood bar for restocking, and at 5pm, members of seafood bar staff successively came to work and parked their motorbikes on one side of the courtyard. In addition, the layout of this courtyard space was changed by 5pm, as the seafood bar had placed many outdoor tables over large parts of the courtyard space. Then at 6pm, the courtyard space became very busy since the seafood bar was open. Simultaneously, there were movements – pedestrians and motorbikes – passing through the courtyard space from one alley to another, activities of the seafood bar customers, waiters and waitresses sitting at and moving around the outdoor tables in the courtyard, and also people visiting the grocery and the temples.

Section 3 (19:00-0:00)

As the event-time map shows, the temple courtyard space was very crowded during the hours of 7pm and 12midnight (Section 3). Most of the activities were related to the seafood bar, such as the movements of sit-in and take-away customers and waiters. In fact, the number of pass-through traffic movements in this courtyard space after 7pm was much smaller than it was during the day. Then we can find sparse activities such as children playing (repeatedly passing through the courtyard quickly on a folding kick scooter at 7pm and 8pm) and grocery visiting interspersed with the substantial period of seafood bar activities.

Both temples on the sides of this courtyard were closed at 10pm. Then the staff from the temple and the seafood bar stayed at the outdoor tables in the courtyard for a drink and a chat until midnight, the time the seafood bar was closed. Just right after the seafood bar closed, at midnight, there was an old couple surreptitiously staying on the flowerbed side under the tree in the silent courtyard for a date.

Section 4 (1:00-6:00)

Almost nothing occurred during this period of observations, only a few motorbikes passing through the courtyard at 5am and 6am.

Use of the Haian Temple Courtyard

Section 1 (7:00-12:00)

The use of this temple courtyard in the morning was not frequent. There was nothing but some small numbers of people visiting the temple and some pass-through traffic. Near to lunch time, however, some leisure and exchange activities happened in the courtyard. At 11am, there were two women staying in the courtyard for a chat, and at 12noon, there were some women who lived around the courtyard chatting away while their little grandsons played around their sides.

Section 2 (13:00-18:00)

As can be found in the event-time map of Figure H3 (p.254), the appropriation of the temple courtyard during the hours between 1pm and 7pm (marked Section 2) had the greatest diversity of activity of the day, leisure and exchange in particular, especially during the hours between 3pm and 6pm. At 3pm, while some people were visiting the temple, the temple administrator came out and sat on the doorway step for relaxation. At 4pm, the temple administrator still sat there throughout the five-minute observation and watched two children playing with bicycles outside the temple in the courtyard. At 5pm, the temple administrator was still sitting there, and there were also two women chatting away while three children played alone in the courtyard. Then at 6pm, another man strolled outside the temple. The children who were playing in the courtyard at 4pm and 5pm lived in the neighbourhood around this courtyard in the interior of the block and had just returned from primary school.

Section 3 (19:00-0:00)

After 7pm, we can find in the event-time map that there were still many leisure and exchange activities in the temple courtyard, and some people visiting the temple. At 9pm, there were two children excitedly playing alone in the courtyard. Then at 10pm, when the temple was being closed, some temple visitors stayed outside the temple in the courtyard chatting with a member of the temple staff before leaving. It is apparent that this temple courtyard was frequently used for leisure and exchange throughout the day.

Section 4 (1:00-6:00)

In this section of observation, nothing happened until the temple was opened at 6am. Throughout the five-minute observation at 6am, in the quiet courtyard, the temple administrator continuously walked around for exercise.

Comparison of the 24-Hour Uses of the Three Temple Courtyards

According to the 24-hour event-time maps of the three temple courtyards, we can find that each pattern of daily use has unique characteristics, although there are some common features and differences which can be generalized. In terms of everyday social practice, the temple courtyard space in the interior of an urban block of central Tainan at least provides the opportunity for the occurrence of these events: 1) pass-through movements of pedestrians, bicycles and motorbikes in the alleys; 2) temporary parking; 3) activities of leisure and exchange; and 4) activities related to the temple courtyard's surrounding facilities. In the city centre of Tainan, the story of one day in the life of a temple courtyard is substantially composed of these events. Since this thesis is concerned with the daily routinization of use and spatial appropriation, it is necessary to compare the relationships between these event elements in the three case-study temple courtyards and over the 24-hour temporal pattern.

It appears that there is a common pattern of daily use of the three case-study temple courtyard spaces during the daytime (the period between 7am and 6pm). In the morning (Section 1), especially before 11am, in all the temple courtyards, there were only some pass-through movements and only a few people visiting the temples. Thus the major activities of daily social interaction commonly started from midday. There were many parking acts in the Yonghua Temple courtyard during the lunch hour but not in the other two temple courtyards. Most of this parking activity involved customers coming for the nearby eating places. Then in fact during the period between 12noon and 6pm, in all of the temple courtyards, the uses were in common in that there were relatively frequent activities of leisure and exchange with the greatest diversity of appropriation during the day. In other words, the majority of social interactions in the temple courtyard generally happened during this period of a day. This

model of daily appropriation has formed a narrative plot that is repeatedly practised everyday on regular weekdays.

After 6pm, however (during the period of Section 3), the uses of the three temple courtyards were considerably different. There were basically hardly any social practices to be found in the Yonghua Temple courtyard during this period. Due to the seafood bar and grocery store on the sides, the courtyard of Zonggan Temple was, on the contrary, very busy until 11pm. Then in the Haian Temple courtyard, there were still some activities of social exchange and temple visiting happening. These distinguishable characteristics shaped the uniqueness of each model of daily cultural appropriation of the temple courtyard. They are clearly represented on the event-time maps. In addition, there is another significant discrepancy in the use of the three temple courtyards, and that is the time and frequency of the occurrence of pass-through traffic. In principle, in all three temple courtyards during the daytime (the period between 7am and 6pm), there was more or less some pass-through traffic in each hour's observation. But the Zonggan Temple courtyard had an obviously higher frequency of occurrence than the other two temple courtyards, while the Haian Temple courtyard had the least. This issue will be examined in more detail in the next section (8.2).

8.2 EVERYDAY LIFE NARRATIVE IN THE TEMPLE COURTYARD

In order to have a better understanding of the process by which the sense of place is produced, we must grasp not only the time-geography-based daily pattern of use, but also the narrative specifics of human tactics. To this end, some significant events in the observations of the case-study temple courtyards will be examined in detail, through the video materials, so as to enable us to comprehend the processes and backgrounds of event occurrences.

Pass-Through Traffic

This category is concerned with the movements that took the courtyard as part of their route to somewhere else, but did not stay. There were some pass-through movements of pedestrians, bicycles and motorbikes found in all three case-study temple courtyards. According to the video materials, these movements passed through the temple courtyards for various purposes.

Yonghua Temple courtyard: everyday pass-through movements of students and tourists

In the Yonghua Temple courtyard, many of the pass-through individuals were students. For example, in my observation, there were successively three children in primary school uniform carried on motorbikes passing through this temple courtyard to school at 8am. It appears that, for people who live in some areas, cutting across this urban block and passing through this temple courtyard is probably one of the most often considered ways to go to the school every morning on weekdays. Also there were many secondary school girls riding bicycles, walking their bicycles or walking alone across this temple courtyard at 6pm. Since there are three girls' high schools near Yonghua Temple urban block, it was to be expected to find so many schoolgirls around this area during the hours before and after school.² According to my observations, some of them moved around the alleys passing through this temple courtyard as a short-cut to somewhere else, although many of them actually came to this place for the snack bars located among the nearby eating places of Yonghua Temple which were particularly popular with students daily during dinner hours.³

² National Tainan Girls' Senior High School, National Tainan Chiachi Girls' Senior High School, and Tainan Municipal Jhongshan Girls' Junior High School are located on the fringe belt area, just a few blocks away, to the south of Yonghua Temple block.

³ According to my interview with the owner of a snack bar, many snack bars around Yonghua Temple were very popular with students daily during the hours after school.

In addition, some tourists could occasionally be found in Yonghua Temple courtyard in my observation, since the Confucius Temple, one of the most popular cultural attractions of Tainan, is nearby. For example, as can be seen in Figure 8.1, there was a backpacker making a quick visit to Yonghua Temple when passing through this courtyard (*left*), and there were also four ladies looking curiously around and discussing the courtyard space (*right*). The tourists, like the students, just made this quiet space relatively lively.⁴



12:02:00 (code 6)



13:04:50 (code 11)

Figure 8.1 Tourists in Yonghua Temple courtyard, snapshots: codes 6 and 11 (referring to Figure F2)

Zonggan Temple courtyard: cutting across the block for daily grocery shopping

Compared with the other two case-study temple courtyards, there are more alleys connecting the courtyard space of Zonggan Temple with the streets on the exterior of the block. Thus the circulation of pass-through movements in the temple courtyard space was relatively more diverse with higher frequency. In Figure 8.2, we can see that there were various tracks of movements passing through the courtyard. In fact, many of them were going to or returning from the area around the traditional market (Youai Market) on the south side of the block, where markets, many butcher's shops and vegetable stalls could be found, for everyday grocery shopping. For example, in Figure 8.3, there was a woman with a shopping bag walking across this temple courtyard towards the market (*left*), and

⁴ According to the owner of a snack bar, there would be more tourists around during the festival seasons of the Confucius Temple.

there was another woman who had just finished her grocery shopping (*right*). The woman riding a bicycle passing through this temple courtyard shown in Figure 8.2 (*bottom left*) was also on a grocery shopping trip, as she returned with vegetables in her bicycle basket. For these people, cutting across the block through the temple courtyard was probably a daily routine route to go to the market.



Figure 8.2 Pass-through movements in Zonggan Temple courtyard, snapshots: codes 39, 40, 42 and 43 (referring to Figure G2)

Haian Temple courtyard: the neighbourhood's everyday space for pass-through

There were relatively fewer pass-through movements in the Haian Temple courtyard, and most of these were pedestrians. More importantly, they were mainly the residents of the neighbourhood who lived in the interior of the block. As can be seen in Figure 8.4, the woman who was hobbling across the courtyard towards the temple just wore pyjamas with slippers (*top left*). She evidently lived inside

the block and felt that this place was quite private. Then in the top right video snapshot, the man on a bicycle passing through the courtyard was the director of Haian Temple committee, who lived at the residence immediately behind my camera's position. In the other two snapshots, the people going out by motorbike (*bottom left*) and the children walking across the courtyard (*bottom right*) all lived near the temple. Since these residents were the main everyday users of the temple courtyard, the resulting sense of place is relatively private.



9:01:00 (code 41)



12:03:00 (code 49)

Figure 8.3 Walking across Zonggan Temple courtyard to the market for everyday grocery shopping, snapshots: codes 41 and 49 (referring to Figure G2)

Finally, I must mention one more type of temple courtyard user. They move around the alleys in the interior of the block everyday, and can be found in all three case-study temple courtyards when passing through. They are the mailmen, LPG cylinder delivery men,⁵ goods delivery men, maintenance service workers and so on. In order to provide services to the neighbourhood in the interior of the block, they must move around the alleys everyday. So their activities also belong to the daily routine appropriation of the temple courtyard spaces.

⁵ There is no liquefied natural gas (LNG) pipeline system in Tainan. Residents need to order liquefied petroleum gas (LPG) cylinders from local domestic LPG suppliers and they are usually delivered by motorbikes.



7:00:30 (code 79)



9:01:50 (code 83)



14:02:50 (code 95)



17:04:50 (code 103)

Figure 8.4 Residents of the neighbourhood in the interior of Haian Temple block, snapshots: codes 79, 83, 95 and 103 (referring to Figure H2)

Parking

The temple courtyard space in the interior of a block is often used for parking because it provides an alternative to the parking spaces on the exterior of the block. But the purpose of parking really depends on the surrounding context.

Yonghua Temple courtyard: temporary parking for nearby places

There was relatively more parking activity in the Yonghua Temple courtyard than in the other two case-study temple courtyards. In particular, during the lunch hour, many people temporary parked their motorbikes in this temple courtyard and walked to somewhere nearby for lunch. As can be seen

in Figure 8.5, there were two ladies parking their motorbike against the left-hand side wall of the temple courtyard at 12noon who then left for somewhere else. The area occupied by many parked motorbikes along the left-hand side wall of my camera's position was in fact vacant in the morning. In the all day observation, it can also be noticed that throughout the day all the motorbikes coming for temporary parking were parked on this area. There seemed to be a tacit agreement about parking motorbikes on this particular area of the temple courtyard.

Apart from the motorbikes, in Figure 8.5, there was also a mini truck temporary parked in the centre of the temple courtyard. This came for home appliance delivery to someone who lived in the neighbourhood in the interior of this block. It was parked in the temple courtyard probably because the alley space was considered too narrow for parking. There was another mini-truck which came for maintenance service in the afternoon and which also parked in the centre of the temple courtyard. Therefore, we can find that not only the people coming to this area for lunch but also the people coming to provide services for the neighbourhood in this block used the temple courtyard space for parking.



12:01:20 (code 5)



12:01:30 (code 5)

Figure 8.5 Parking in Yonghua Temple courtyard, snapshots: code 5 (referring to Figure F2)

Zonggan Temple courtyard: temporary parking for surrounding facilities

The Zonggan Temple courtyard space was also sometimes used for parking, but the purposes of parking in this space and in Yonghua Temple courtyard were different. The vehicles that came into this space for parking were mainly involved in the routine operation of the temple courtyard's surrounding facilities, such as restocking goods at the seafood bar (Figure 8.6, *left*), loading goods for delivery at the carton box factory and the LPG supplier. After 5pm, when the seafood bar staff started working, there were a lot of motorbikes parked in front of my camera's position along the right-hand side edge of the temple courtyard. As can be seen in Figure 8.6 (*right*), there was a member of the seafood bar staff parking his motorbike in this area before going to work. Some of the customers of the seafood bar and the grocery also parked their motorbikes in this area. Therefore, we can find that the people who came to park in this temple courtyard space were mainly doing so for both working and consuming in the temple courtyard's surrounding facilities (seafood bar, grocery, LPG supplier and carton box factory). Unlike the situation in the Yonghua Temple courtyard, nobody came to park in this temple courtyard space for the purpose of visiting somewhere nearby (a few minutes' walk from the temple courtyard). This was probably because, for parking, the exterior spaces of the Zonggan Temple block were quite convenient, easier than those of the Yonghua Temple block. So it was unnecessary for people who were going to visit somewhere nearby to come into the interior of the block for parking.



16:04:00 (code 58)



17:00:00 (code 59)

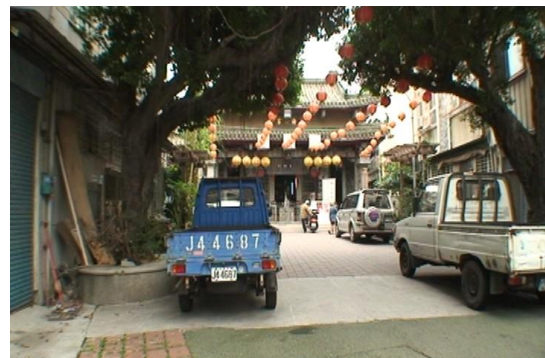
Figure 8.6 Parking in Zonggan Temple courtyard, snapshots: codes 58 and 59 (referring to Figure G2)

Haian Temple courtyard: neighbourhood private parking

The situation of parking in the Haian Temple courtyard was very different from that in the other two temple courtyards. The interior of this urban block was a simple residential neighbourhood, and there were no commercial facilities around the temple courtyard. The residents who lived on the temple courtyard sides just occupied the space outside their properties for permanent private parking. Since there were no commercial facilities around this temple courtyard, people who were not local residents came to park here, in most cases, only for two reasons: visiting someone who lived here or visiting the temple. As can be seen in Figure 8.7 (*left*), there was a person driving away after visiting someone who lived on the courtyard side. There was no space for making a U-turn in the courtyard due to the private parking and the fact that the alleys near the temple were too narrow to be accessed by cars. Thus the car could only get out of this place by reversing. As for people who visited the temple, they usually just parked their cars or motorbikes right outside the temple, as Figure 8.7 (*right*) shows.



14:00:00 (code 94)



15:00:40 (code 96)

Figure 8.7 Parking in Haian Temple courtyard, snapshots: codes 94 and 96 (referring to Figure H2)

Visiting Surrounding Facilities

Surrounding facilities refer to the buildings on the temple courtyard sides that are open to the public, such as the temples and the restaurant (Green House) on one of the Yonghua Temple courtyard sides

and the seafood bar and grocery on the Zonggan Temple courtyard sides.

Temple visiting

In the observation, we can occasionally find people visiting the temples during the temple opening hours, including both residents of the neighbourhood in the block and visitors from elsewhere. Some of the residents of the neighbourhood in the block appeared to visit the temples regularly everyday. For example, there was an old man hobbling to Yonghua Temple for worshipping twice in the day at 4pm and 5am. According to the video and the snapshots shown in Figure 8.8, we can tell that he is likely to be a regular temple visitor because he looked so pious, he was the only person who visited the temple at 5am when the temple was just open, and he always brought his own incense (people, especially casual visitors, usually pay for the incense provided by the temple). Also, according to the observations of the three temple courtyards, most of the temple visitors did not stay in the courtyard, and only some of them remained outside the temple for a chat.



16:00:30 (code 17)



16:00:40 (code 17)

Figure 8.8 Visiting Yonghua Temple, snapshots: code 17 (referring to Figure F2)

Commercial activities in the temple courtyard

Some customers of the restaurant (Green House) on Yonghua Temple courtyard side parked their motorbikes in the courtyard. But for those who drove, they parked outside the block and walked into

the temple courtyard. Except for parking, most of the restaurant customers did not stay in the temple courtyard. As for those who stayed, they were there for chatting, waiting for other people or talking on a mobile phone. Most of the customers of the grocery store next to Zonggan Temple also did not stay in the temple courtyard. Yet the business of the seafood bar had a great impact on the appropriation of the Zonggan Temple courtyard. Since their outdoor tables were spread over large parts of the temple courtyard space everyday during the hours of dinner, movements, both pedestrians and motorbikes, which attempted to pass through this courtyard space, as can be seen in Figure 8.9, had to negotiate a passage through the gaps between the tables. Also, because this seafood bar was very popular, with so many outdoor tables in the temple courtyard, this space was very bustling everyday during the hours of dinner.



17:02:30 (code 61)

20:02:50 (code 69)

Figure 8.9 Seafood bar outdoor tables in Zonggan Temple courtyard, snapshots: codes 61 and 69
(referring to Figure G2)

Leisure and Exchange

There are many leisure and exchange activities which can be found in the observations of all three temple courtyards. The people who participated in these activities included not only the residents of the neighbourhood in the block but also people from elsewhere. The stories of these social interactions

were varied. The following is a collection of the most significant extracts.

Yonghua Temple courtyard: a place of encounter

In my observation, there was a chance encounter in the Yonghua Temple courtyard involving three people who knew each other, as can be seen in Figure 8.10 (*left*). One of them was an artist who worked in the studio on a corner of the temple courtyard (the one on the left in the snapshot). At that time, he had arrived at work and was parking his motorbike outside his studio. Another, a middle-aged man who lived in the neighbourhood in the interior of the block, was strolling in the temple courtyard (the one on the right). The third was an old man, also a resident of the neighbourhood in the block, who was just coming out from the temple after taking a meal box to someone in the temple (the one in the middle). Since they had a common everyday life sphere around the temple courtyard, they probably often met and had known each other for some time. In this encounter, they had a short chat for a few minutes in the temple courtyard. This was the only social interaction among people who lived nearby during the day of observation.



14:02:40 (code 14)



18:00:00 (code 22)

Figure 8.10 Social interaction in the Yonghua Temple courtyard, snapshots: codes 14 and 22 (referring to Figure F2)

There were two old men sitting on the bench in the doorway of Yonghua Temple for a chat, as shown

in Figure 8.10 (*right*). They came to the temple by motorbike and parked it in the courtyard. After worshipping, they had a long chat on the bench before leaving. They were the only people using the bench for social interaction during the day. Since they travelled to this place by motorbike, they were probably not residents of the neighbourhood in this block.

Zonggan Temple courtyard: a place for conversation

There were three women chatting in a corner of the Zonggan Temple courtyard, near the grocery store, at 5pm. One of them lived in the house next to the LPG supplier on one of the temple courtyard sides. Another with a pram lived near the temple courtyard, also in the neighbourhood inside this block. The third was a visitor to the one who lived next to the LPG supplier and she parked her motorbike in the courtyard. This event was apparently not a chance encounter, but a friend visiting. We can see that the temple courtyard space was used by the nearby residents as a place for interaction with friends.



16:03:40 (code 58)



20:02:50 (code 69)

Figure 8.11 Leisure and exchange in Zonggan Temple courtyard, snapshots: codes 58 and 69 (referring to Figure G2)

The flowerbed side under the tree in the temple courtyard was occasionally used as a seat for social interaction. There were two men sitting there at 4pm for a chat, as can be seen in Figure 8.11 (*left*). Also a couple stayed there for a date at midnight. As these people came to the courtyard by motorbike

or bicycle, they were probably not residents of the neighbourhood in this block.

There was a child on a folding kick scooter passing through the temple courtyard twice, at 7pm and 8pm. He was the only child captured in my video observation in Zonggan Temple courtyard. As can be seen in Figure 8.11 (*right*), he was in the centre of the snapshot, but the space, during the dinner hours, was limited by the outdoor tables of the seafood bar, the busy movements of seafood bar and grocery activities, as well as other pass-through traffic. This temple courtyard space appeared to be not a proper place for children's leisure activities.

Haian Temple courtyard: a place for neighbourhood and children's leisure activities

There were often some people who stayed in Haian Temple courtyard for a chat. A woman rode a bicycle to Haian Temple at 11am to find the temple administrator. They then came out from the temple and stayed in the courtyard for a long chat, as shown in Figure 8.12 (*left*). Also there were two people who lived in the houses on the temple courtyard sides having a conversation in the courtyard at 5pm. It appears that the temple courtyard was often considered as a good place for social exchange.



11:02:40 (code 86)



12:02:50 (code 91)

Figure 8.12 Leisure and exchange in Haian Temple courtyard, snapshots: codes 86 and 91 (referring to Figure H2)

In the observation, children were frequently seen in this temple courtyard. There were two little boys who lived on the temple courtyard side playing in the courtyard at midday, as can be seen in Figure 8.12 (*right*), while their grandmothers were chatting at their side (behind my camera's position). There was another boy who appeared in the courtyard when he walked with a yo-yo across the courtyard at 1pm. Then during the hours after school at 3pm, 4pm and 5pm, there were also some children, who lived in the interior of the block and had just returned from primary school, who can be found playing in the temple courtyard (they can be seen in Figure 8.4, p.234, *bottom right*). At 9pm, there were two little children coming with their parents to the temple for worshipping. While their parents were still in the temple, they played excitedly in the courtyard. With less pass-through traffic and without commercial activities, the appropriation of this temple courtyard space had a relatively intimate connection with the neighbourhood, and the space appeared to be friendlier for children's activities.

Summary: social interaction in the temple courtyard

According to the analysis given above, we can find that the residents of the neighbourhoods around the temple courtyards, when encountering others, did not often use the leisure facilities of the temple courtyard, such as the bench in the doorway of Yonghua Temple and the flowerbed seat in Zonggan Temple courtyard, but rather they tended to stand for social interaction. Thus these facilities were usually used by people from elsewhere or who needed longer time for relaxation or conversation.

Overall, the 24-hour appropriations of the three temple courtyards were similar in the making of the everyday sense of place, while each of them had unique characteristics of narrative structure. In the vicinity of Yonghua Temple, there were many eating places, schools and the Confucius Temple, so the people who participated in the everyday use of the temple courtyard, the interior everyday space of the urban block, included not only residents of the neighbourhood in the block but also customers of the eating places, students and tourists. On the perimeter of the Zonggan Temple block, there were

shopping streets and market places, and in the interior of the block around the temple courtyard there were a seafood bar and a grocery store. Thus apart from residents of the neighbourhood in the block, the people who took part in the commercial activities, such as grocery shopping and having dinner at the bar, also participated in the everyday use of the temple courtyard. As a result, in the interiors of the Yonghua and Zonggan Temple blocks, there were many public issues, such as parking and seafood bar activities, involved in the private social life of the neighbourhood. The people involved in these activities certainly influenced the narrative specifics of everyday life. It is noteworthy that there were hardly any children found in these two temple courtyard's appropriation. By contrast, children were frequently seen in Haian Temple courtyard. Haian Temple was located in the centre of a relatively simple residential urban block. Most of the people who participated in the everyday appropriation of the temple courtyard were the residents of the neighbourhood in the interior of the block. With fewer public issues occurring in the temple courtyard, the residents' daily social practices, such as private parking, neighbours' conversation, and children playing, had a relatively closer relationship with the interior everyday space of the block.

Finally, we can see that, in the interiors of urban blocks, these temple courtyards have a common everyday sense of place. They are part of the alley circulation network and are the centres of the neighbourhood's daily social interaction. They are the places of certain groups of people's routine everyday life. They can be the spaces for everyday pass-through movements, for parking and for social exchange. These activities have a strong connection with the surrounding context, for example, passing through the temple courtyard for heading to the market, or parking for visiting the nearby eating places. So the interior everyday space of an urban block is connected with the city context in terms of social practice. This connection causes the uniqueness of each block interior's everyday space in cultural appropriation. Moreover, the interiors of urban blocks appear to sustain a balance between local social interaction, commercial activity and flow of people, vehicles and goods. In this

respect, the blocks support both places of rest and vectors of movement or short-cuts. Most importantly, the interior everyday space of a block in the city centre of Tainan is not just the neighbourhood's space, but also a place which provides a common background for the contemporary everyday narrative of Tainan.



Figure F1: Representation of one day in the life of Yonghua Temple courtyard

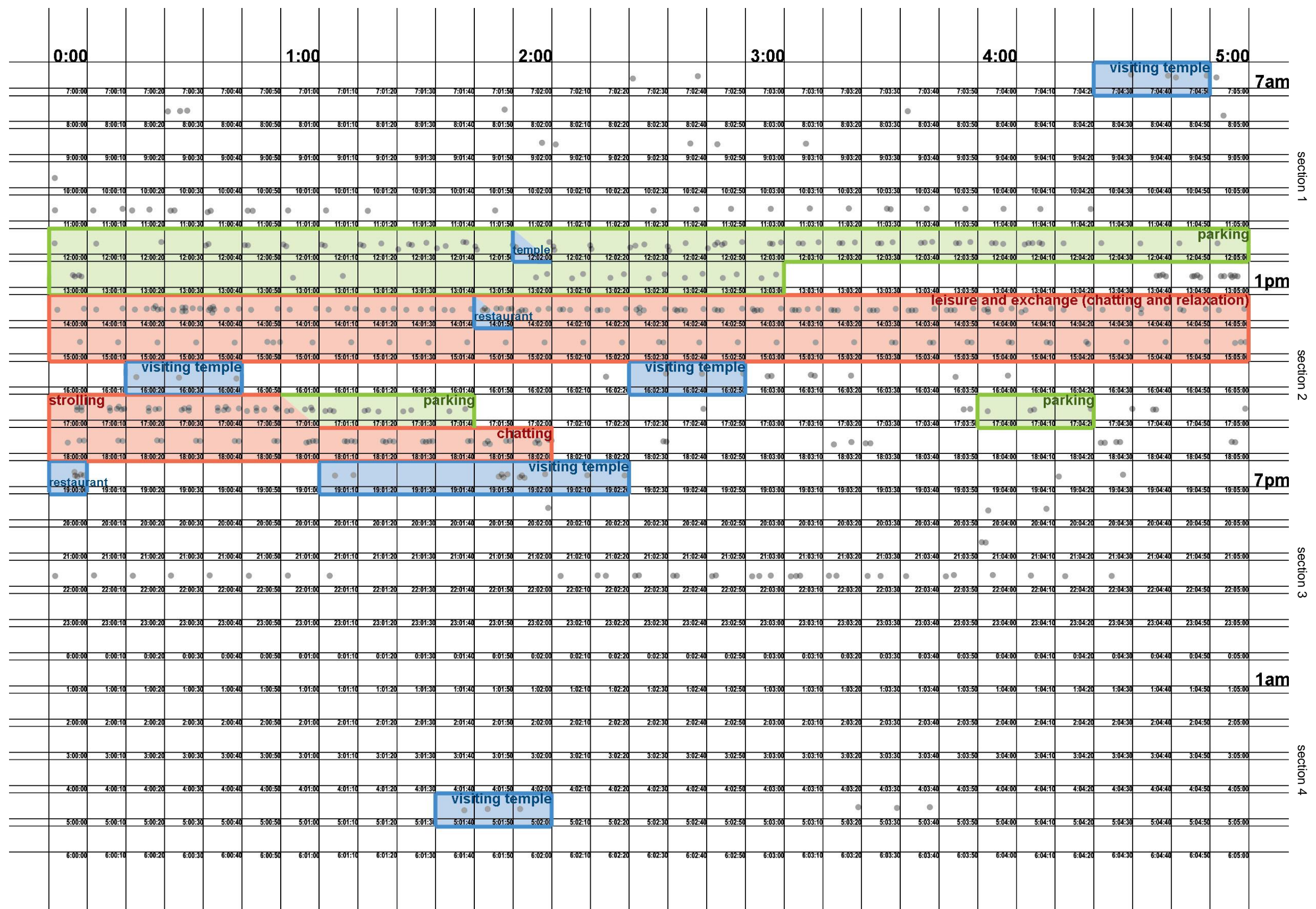


Figure F3: Everyday event-time map of Yonghua Temple courtyard (■ visiting surrounding facilities, ■ leisure and exchange, ■ parking)

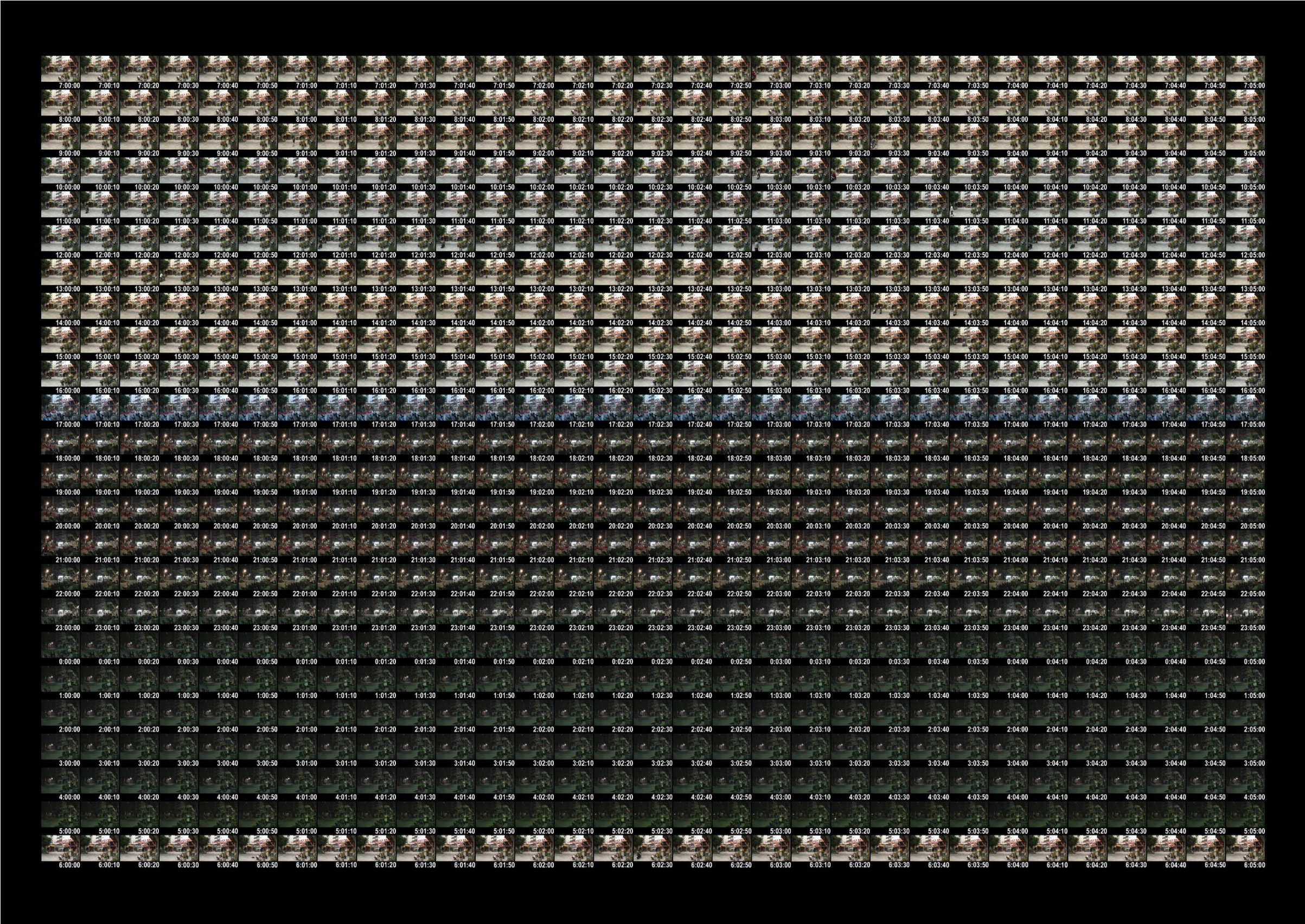


Figure G1: Representation of one day in the life of Zonggan Temple courtyard

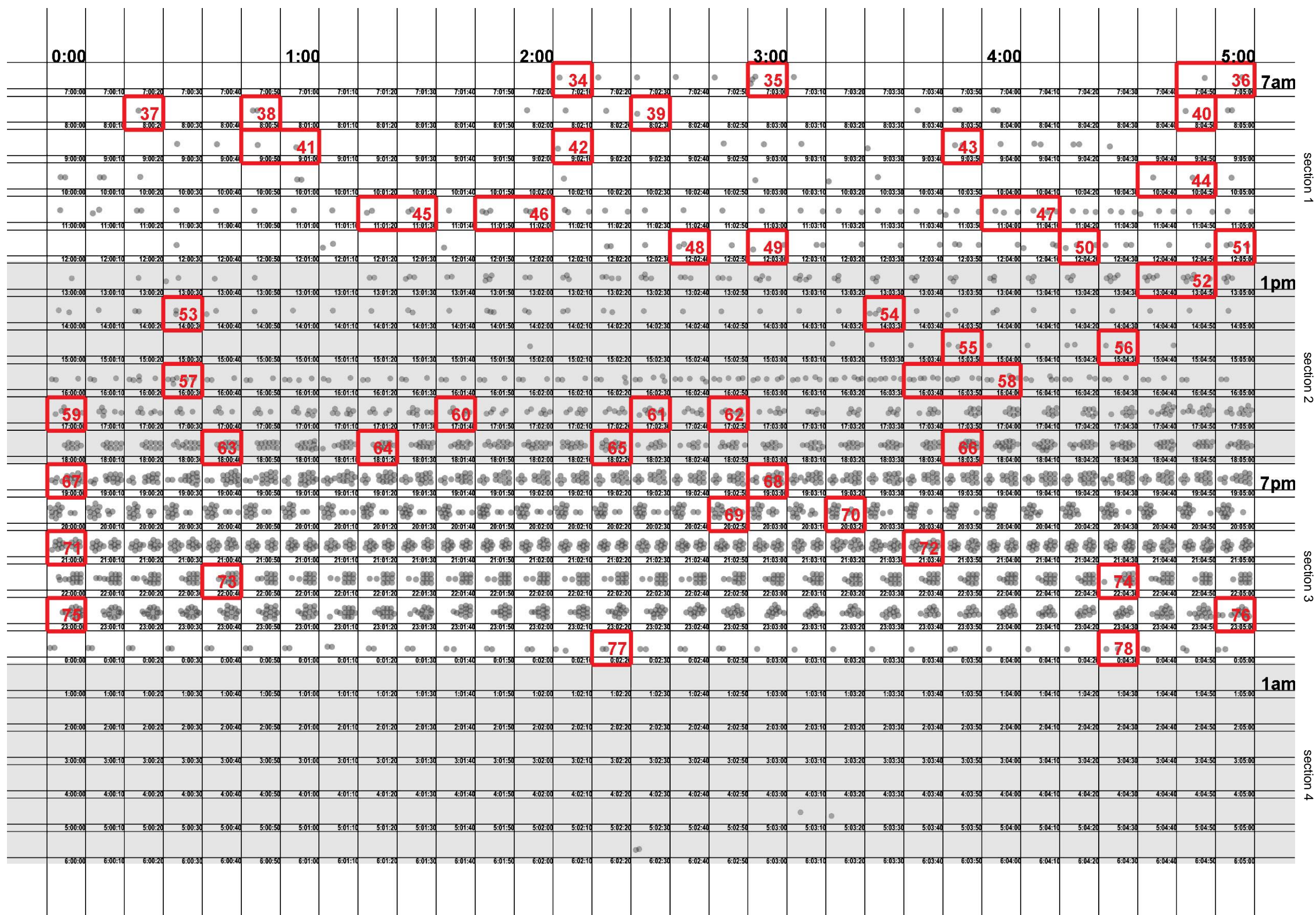


Figure G2: Reference sheet for Figure G1 (the boxes with code numbers in red referred to the images used along with the text)

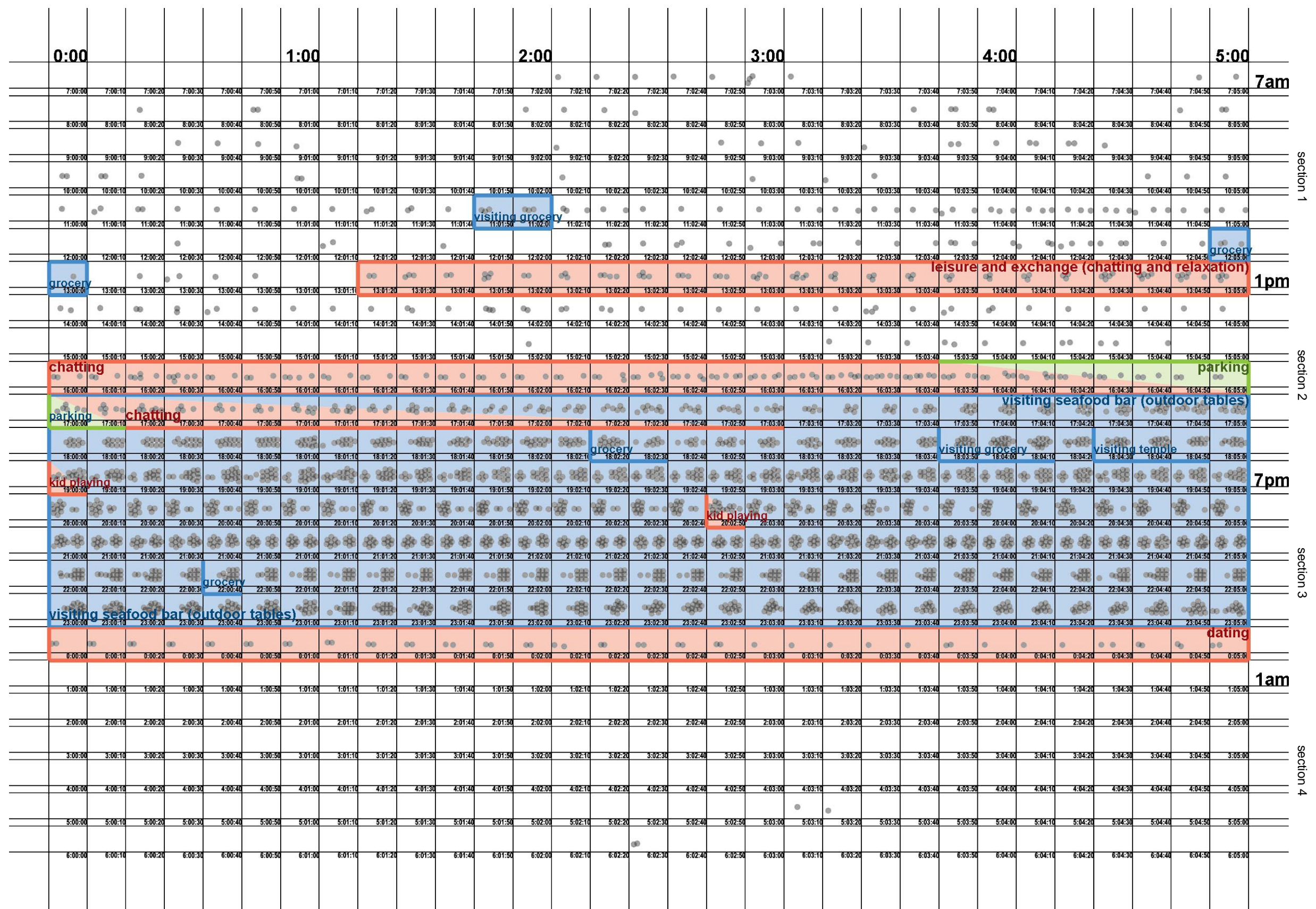


Figure G3: Everyday event-time map of Zonggan Temple courtyard (■ visiting surrounding facilities, ■ leisure and exchange, ■ parking)

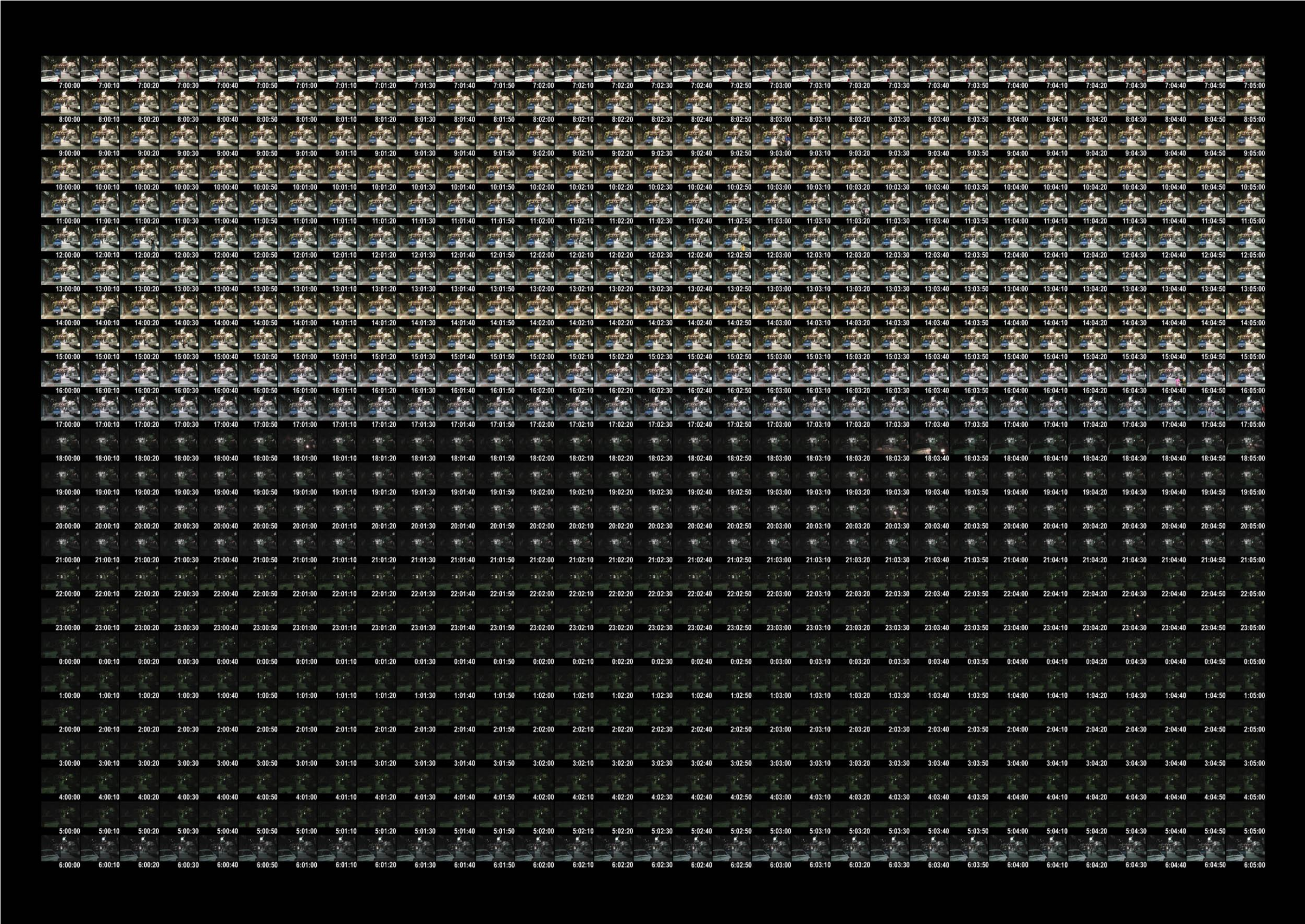


Figure H1: Representation of one day in the life of Haian Temple courtyard

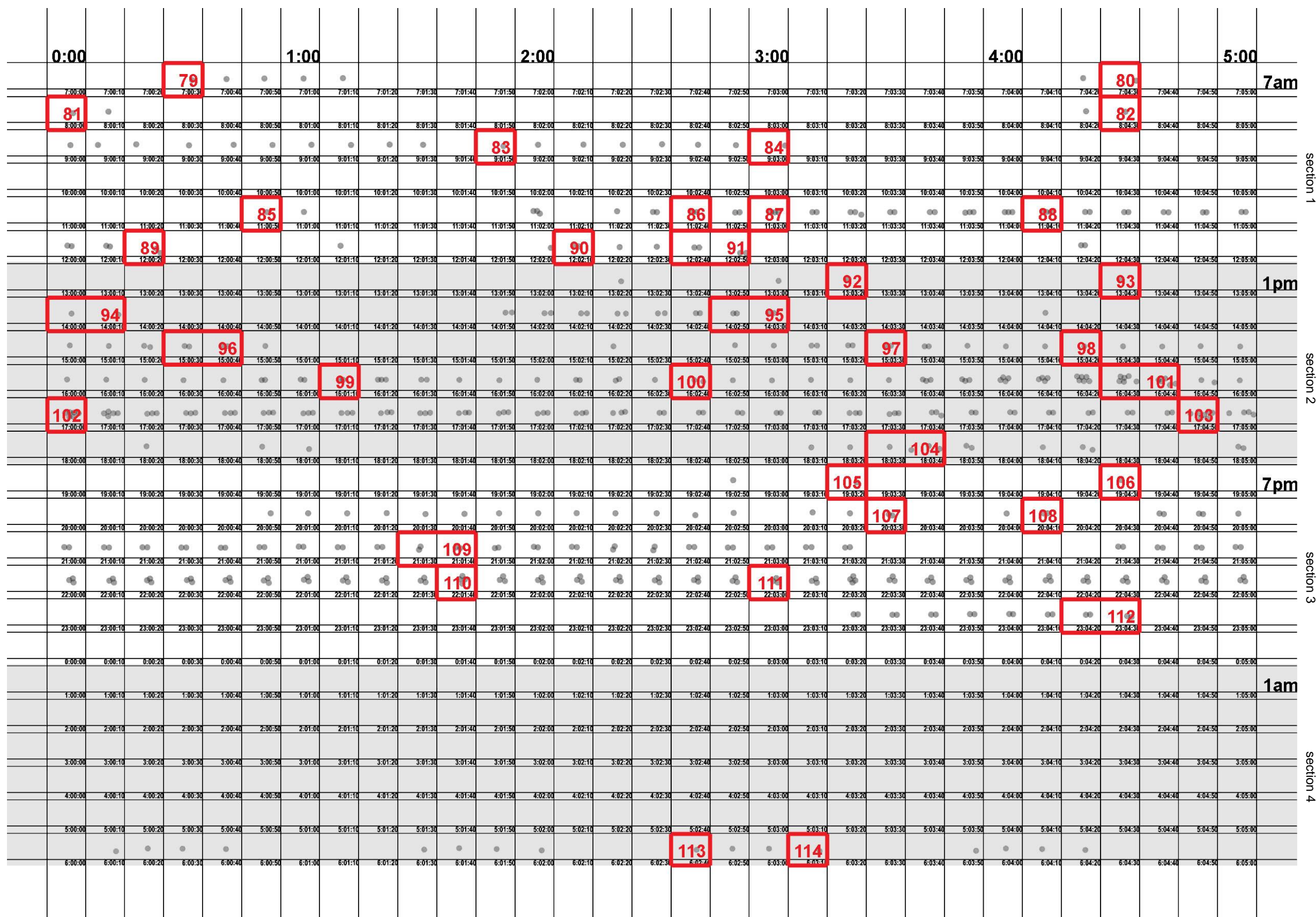


Figure H2: Reference sheet for Figure H1 (the boxes with code numbers in red referred to the images used along with the text)

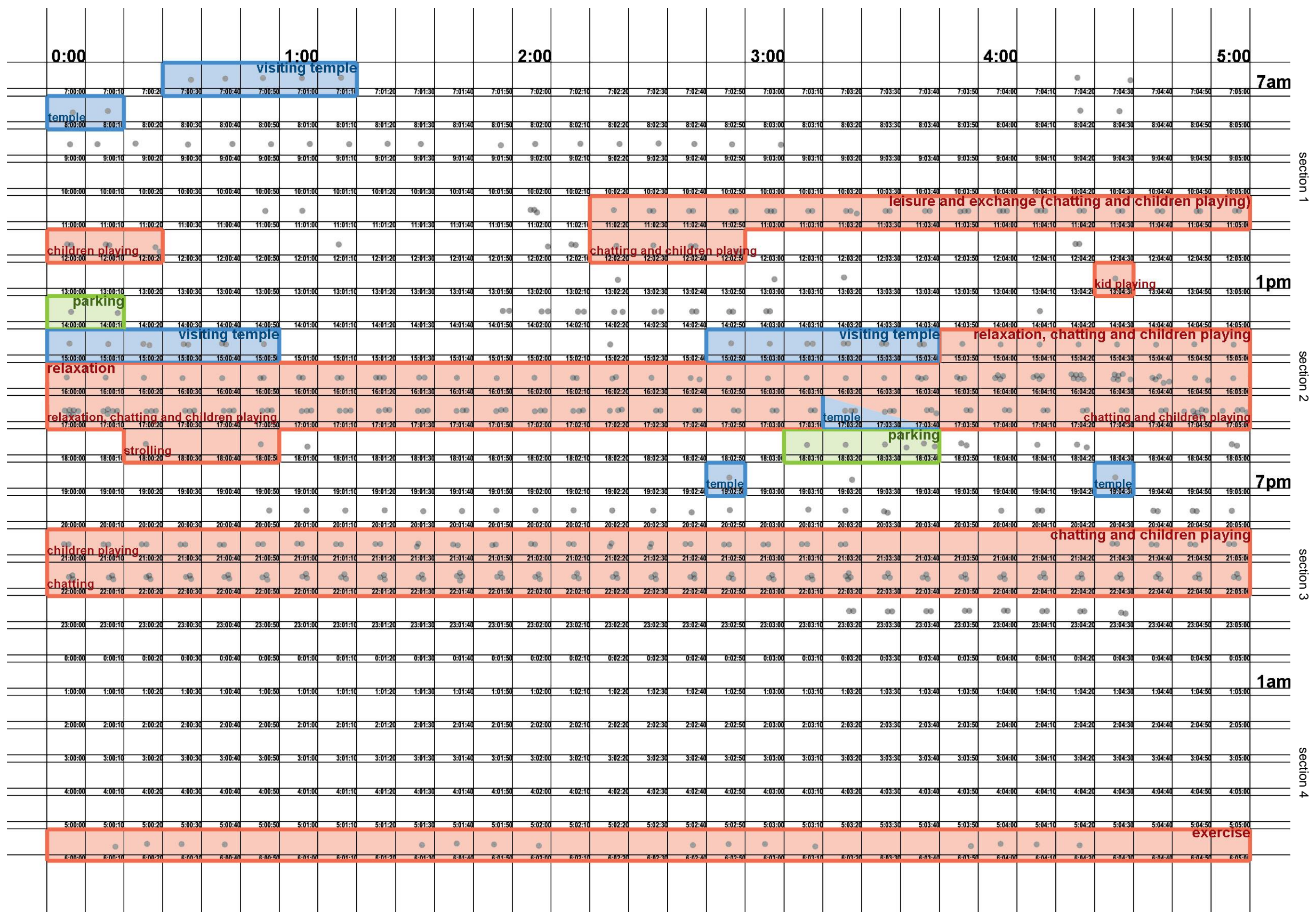


Figure H3: Everyday event-time map of Haian Temple courtyard (■ visiting surrounding facilities, ■ leisure and exchange, ■ parking)

THE INTERRELATIONSHIP BETWEEN URBAN MORPHOLOGY AND EVERYDAY LIFE IN CENTRAL TAINAN

[The historic city centre of Tainan] is full of carefree and leisurely living elements that are fashionable today ... the everyday characteristics of the tortuous, winding alleys and the open spaces let me feel intensely the self-confidence of the residents in their living environment and the hidden pride in their everyday culture. Such a sense of feeling rarely happens in the experience of other cities.¹

(Liu 2010: 3)

Before starting the discussion, we should briefly review the aim of this thesis so as to ensure that the direction of this chapter's discussion is helpful. The ultimate target of this thesis is to understand the characteristics of urban morphology and of the everyday life style in central Tainan so that we can provide appropriate ideas and suggestions for the management of future urban change. Following a particular line of urban conservation scholarship, this thesis argues that urban conservation is probably the most appropriate philosophy for the management of urban change, and that change should be considered as part of an urban conservation policy. But the approach to urban analysis – urban morphology – suggested by this particular conservation scholarship appeared to be in need of adjustment for the study of the postcolonial urbanism of central Tainan. Due to the colonial urban reformation in the city, the process by which today's urban structure has been formed was interrupted and tends to be regarded, consequently, as being incoherent. The historic significance and value of the urban fabric in this city are thus disputed in conservation practice. Therefore, this thesis seeks an

¹ This description is in my translation. Original text: [府城]充滿現今流行的慢活樂活的元素... 小巷小弄的彎曲和蜿蜒，還有諸多公共空間藩籬的拆除，都讓我強烈感受到市民對自己生活家園的自信，以及隱藏於後的文化自負。這是其它都會較少出現的。

approach that takes into account the continuity of contemporary everyday senses of place and urbanism. In this approach, the historical urban fabric should be taken into consideration to preserve memory and tradition as much as serving as an ‘incubator’ of new senses of place. For the urbanism of Tainan, new senses of place can refer to the senses of place developed in the response of social practice to the postcolonial urban structure, and that is rooted in the contemporary everyday life, separate from the historicity.

The case studies in the preceding chapters provide the background of urban morphology and everyday life in central Tainan and they are helpful in enabling us to grasping the value of the urban fabric in the formation and transformation processes as well as the pattern of contemporary everyday social practice. The aim of the discussion in this chapter, in the light of the information acquired from the case studies, is to rehearse the characteristics of the urban morphology and the everyday life-style of central Tainan together, so as to understand the uniqueness of the interrelationship between the senses of place in the urban fabric and the resulting cultural experience of use of the postcolonial everyday space of Tainan. These discussions will also suggest the concept of the heterotopic urbanism of central Tainan, and, as we shall see in Chapter 10, an understanding of the heterotopic urban condition will help to determine the principles which might appropriately guide future urban change.

The discussions in this chapter will be divided into three sections. The first section (9.1), ‘Morphology and the resulting condition of social practice’, will focus on the urban material and functional structures and how these structures condition the everyday social practice of today. The second section (9.2), ‘Temple courtyard: social core of an urban block’, will indicate something of the key morphological characteristic of the temple courtyard as an everyday space in the centre of a block. The third section (9.3), ‘Everyday social practice in the temple courtyard’, will emphasize the

everyday cultural story of appropriation and enable us to understand how the everyday life tactics survive under the morphological conditions.

9.1 MORPHOLOGY AND THE RESULTING CONDITION OF SOCIAL PRACTICE

Based on the case-study explorations, this section will summarize some of the most significant morphological characteristics in the urban blocks of central Tainan, with particular emphasis on their relationships with the city, the interaction between them, their morphological organization and the resulting everyday social structure. Through these discussions, the outline of the morphological and social conditions of central Tainan can be grasped.

City Centre and Fringe Belt

‘Central Tainan’ has been mentioned in this thesis several times. This term is often used by urbanists to describe the area of Tainan with longest history which acted as the centre of the growth-ring in the pre-modern urban growth process.² In general, it refers to the city centre area around the cross-axes, embracing Confucius Temple, Chihkan Tower and the Five-Canal areas, as shown in Figure 6.1 (p.157). Being the main concern of this thesis, we need to ask: is it distinct from the other areas of Tainan morphologically? It appears that this concept can be considered together with the concept of fringe belt. To make the argument clearer, I shall suggest that it was the area which had been densely developed by the end of the 19th century, as shown in Figures B (p.189) and 7.1 (p.192). This

² The area (boundaries) of central Tainan has never been defined clearly but it is often referred to as the area with longest history in Tainan, as can be found in Chen (2007), Liu and Chen (2005).

suggestion is based on the morphological distinctiveness of the area. Although urban blocks are the basic architectural elements everywhere in the city, the blocks in this area, which had been densely developed by the end of the 19th century, share a unique morphological character that makes them distinguishable from the blocks of other areas. Hidden in the interior of these blocks there are labyrinthine alley fabrics that reflect the pre-modern morphological and social background of the city. They are where the stories of ancient axes and canals as well as a life-style founded on the social cores of temples reside, and are also where, as I shall argue, the heterotopic urban condition can be diagnosed. A fringe belt morphological character can also be found in the periphery of this area. By contrast with the morphology of the urban blocks in 'central Tainan', the blocks in this fringe belt are occupied by large public facilities such as schools, hospitals and parks developed in the Japanese Colonial Period, as can be seen in Figure 6.11 (p.184). This morphological contrast well defines the area of central Tainan, and then the fringe belt, as Chapter 6 suggested, has become the boundary between the older urban fabric and the areas developed in the postcolonial period.

Islandized Urban Elements

As a result of the Japanese Haussmann-like urban reformation plan, the structural system of central Tainan has been changed from a state of relatively coherent, historically accreted urban fabric to a fragmented condition of islands and enclaves. This islandized urban condition has a direct impact on the traditional neighbourhood life-style that was founded on the social cores of temples. This pre-modern neighbourhood life-style was formed out of the concept of '*jing*'. This idea, as defined in Chapter 6, caused residents of a particular area to cohere as a result of shared religious conviction and loyalty, and to form a territory for self-defence. These territories were never determined in accordance with the physical condition of urban elements. In other words, society in the pre-modern city centre of Tainan was not dominated by the spatial morphology, but by the power of faith. Today, however, with

the islandized condition, a temple can probably only be the social core of the neighbourhood limited to within the block in which it is located, because, separated by planned streets, it is difficult for it to influence the everyday lives of those living in nearby blocks. Nowadays, the concept of *jing* only works for purely religious purposes, for example temple festival activities, and this implies that it has been broken in terms of everyday life. It is apparent that the continuity of contemporary everyday social appropriation is restricted by the islandization of the morphology. In this sense, the everyday life of today is founded on an alienated social condition.

In addition, compared with the interior of a block, the perimeter locations have better conditions for commercial activities because they are easier to reach and, because they are equipped with *ding-a-ka* spaces (see Chapter 6 for the urban planning regulation regarding *ding-a-ka* spaces), they also have better pedestrian quality. Thus, in the case-study urban blocks, it is observable that mixed-use and commercial properties are mostly located on the perimeter of a block, while the interior of a block is relatively quiet and residential. As a result, the continuous busy commercial public activities on the perimeter of a block often isolate the relatively private everyday social practice of a local neighbourhood in the interior of an island. This centre/perimeter contrast condition of a block forms a unique islandized pattern of social practice that hides the everyday life of a neighbourhood from the streets.

Organization of an Urban Block

Although the formative background of urban blocks in central Tainan appears to be similar to the story of Haussmannization, the structures of their plot organization are however very different. The building plots in Haussmannian blocks, as explored in Chapter 3, were reorganized with proper proportions during the process of urban reformation. But the elements of Tainan's urban blocks had remained

almost unchanged from the fabrics developed in the Qing period. As can be seen in Figures C, D and E (Chapter 7, pp.218-220), although the plots on the perimeter of a block in Tainan were reshaped in the reformation process, they are not as organized as the plots in Haussmannian blocks. So the plot and alley fabrics in the interior of a block are today almost just the same as they were in the Qing period. These preserved alley fabrics are not only of significant urban heritage but are also closely related to the contemporary everyday life of central Tainan. That is to say, the everyday social practice of central Tainan resides in the tension between the modern islandized block structure and the pre-modern fabric.

As for the relationship between urban blocks, morphologically, the alleys in the interior of a block can run continuously and fluently through the nearby blocks. In other words, overlapping with the Japanese colonial grid structure, the pre-modern alley network still exists in the city centre of today. This morphological condition has had a clear influence on the everyday life-style of those who live there. In the everyday life empirical observations, there were constant pass-through movements in the temple courtyard of each case-study urban block. These people did not move along the major streets but moved through the centre of a block to take a short cut to somewhere, such as a school or a market. These movements might not just cut across one block, but move through the interiors of several blocks successively along the alleys towards particular destinations. There is in fact a coherent network of circulation in the alleys, in contrast to the typical routes of movements in the major streets. Local residents may move around the city centre using either approach, or a combination of both of them. Cutting across the blocks, the movements in the pre-modern alley network then connect the islands into a firmer and more coherent relationship. It appears, with the flows of traffic, that this ancient alley network developed before urban reformation secretly allows a relatively coherent social condition to resist the alienation of everyday society in the islandized morphological condition of central Tainan.

Heterogeneous Condition

Since the urban planning principles in the City Improvement Plan of Japanese colonial Tainan was mainly influenced by the urban plans of London and Paris at that time, the concept of zoning was certainly considered in the planning of Tainan. The zoning system of central Tainan introduced by the Japanese is still in use today. Under this system, the entire historical city centre of Tainan is zoned for commercial development. All the lands, whether located on the perimeter or in the centre of a block, can potentially be developed for commercial purposes. However, in practice, there has always been a commercial/residential contrast condition between the perimeter and the interior of a block.

The postcolonial government of the late 20th century believed that the size of the blocks developed by the Japanese was too large to encourage commercial development to occur in the interior of a block because the large network of labyrinthine alley fabric in a block was unfavourable for the necessary traffic of commercial development.³ Thus, many blocks were subdivided during the period from 1980 to 1995. Maps of the former larger blocks and the subdivided smaller blocks can be found in Figure B (p.189) for comparison. However, did this subdivision plan really improve the situation? Yonghua Temple and Haian Temple blocks were produced as a result of this subdivision plan, as the street on the north side of Yonghua Temple block and the streets on the east and south sides of Haian Temple block were built in the late 20th century for this purpose. Then, as we have observed, although there were some mixed-use properties which developed on the north side of the Yonghua Temple block, the locations around the east and south sides of the Haian Temple block still remained residential. Also, even though the size of a block was cut smaller, the commercial/residential contrast condition of a

³ As can be seen in Chapter 3, the sizes of urban blocks in London and Paris are much smaller than the block size of central Tainan.

block was not changed. According to Huang (2001), this was probably because the population of central Tainan had become accustomed to living in such a commercial/residential mixed-use condition. As he indicated, located in the city centre, it was very easy and convenient for residents of the interior of a block to find all kinds of amenities and services, and to reach their workplaces. Thus, the residents tended to continue to occupy the neighbourhood rather than move away in the face of commercial development.

Because of this commercial/residential mixed-use condition of a block, it appears that, in central Tainan, walking on major streets (the grid system), one can find only successive bustling commercial spaces, but there is always a quiet residential neighbourhood with a traditional alley fabric hidden in the interior of an island by the exterior commercial buildings. With the islandized urban morphology of central Tainan residing in the heterogeneous block condition and the continuous alley network, the everyday cultural model of social practice thus forms a unique urbanism in which the social condition is neither alienated nor traditional; it appears to be heterotopic. The following discussion in Sections 9.2 and 9.3 will focus on the interaction between the everyday life practice revealed by empirical observation and the spatial typology of urban block, so as to lead us to elaborate the concluding discussion of heterotopic urbanism.

9.2 TEMPLE COURTYARD: SOCIAL CORE OF AN URBAN BLOCK

In typomorphological terms, the urban blocks of central Tainan can be classified into two types based on whether or not a temple courtyard is contained in the centre of a block (the distribution of temples can be seen in Figure 7.1, p.192). Because the alley spaces are narrow and without other public open spaces in the interior of a block, where there is a temple courtyard, it is certainly the most important

space for social interaction and thus is often the social core of everyday life for the surrounding neighbourhood. The three case-study urban blocks of this thesis all belong to the type of block with a temple courtyard in its centre. Based on the case-study explorations, the subsequent discussion will summarize the morphology and social functional condition of a temple courtyard, so as to allow an understanding of the typological characteristics of such an urban block.

Configuration of a Temple Courtyard Space

The courtyard of a temple in Tainan was normally not shaped by buildings when the temple was built. There were 31 temples, the oldest temples of Taiwan, which emerged in Tainan during the period of Koxinga's rule (Ke 1998). Most of these ancient temples developed under Koxinga were not located in the then densely developed cross-axial areas, but somewhere in the countryside. As explored in Chapter 7, all the historic temples in the three case-study areas had originally been established on relatively undeveloped open ground and connected with the city by country paths. So there was no element such as a courtyard or a close in front of a temple, but a freely shaped open area of ground surrounding the temple. In this case, today's temple courtyard shape was conceivably formed when the urban expansion reached the temple's surroundings. In order to allow the continuity of the existing social function provided by a temple's surrounding open spaces, a courtyard space was naturally and spontaneously shaped in the process of the neighbourhood development around the temple. This morphological characteristic in the formative process of a temple courtyard has already been indicated by Chin Hsueh (1990: 43) and Sheng-Hsien Wei (1998: 2.17). This thesis further supports this argument by the technique of morphological mapping. The clearest example is perhaps the courtyard morphology of Haian Temple shown in Figure E (p.220). In Figure E1, we can see that the temple was located on an area of open ground surrounded by open countryside in the late 19th century, and then, as

a result of urban growth (see Figure B, p.189, for the growth process), as Figure E2 shows, the temple today is surrounded by buildings, and by the layout of these buildings the courtyard is also formed.

In addition, various studies of temple courtyard morphology have identified common morphological characteristics which can be found: the courtyard must be in the front of the temple (Sun 1992: 25); the courtyard must be intimately integrated with the surrounding street and alley fabrics and become part of the flow network (Hsueh 1990: 43); streets and temple courtyards are the most important elements of the open space system in the Qing period fabric of Tainan (Wu 1995: 55). These morphological characteristics can easily be found in Figures C, D and E (pp.218-220) and are important to our subsequent discussion of the interaction between the temple courtyard space and everyday life.

The Case-study Temple Courtyard Spaces

With the common morphological characteristics elaborated above, in the surrounding fabrics of the three case-study temple courtyards there are some observable morphological differences. In terms of the combination logic of a temple courtyard and the connecting alleys, according to the architectural historian Chuan-Wen Sun (1992), there are seven typologies of temple courtyard which can be found in central Tainan, as shown in Figure 9.1. Based on his classification, Yonghua Temple courtyard should belong to Type 6; Zonggan Temple courtyard is probably a combination of Types 1 and 2; and Haian Temple courtyard can be considered as Type 2 with a cul-de-sac. The surrounding fabrics of these three temple courtyards can be found in Figures C, D and E (pp.218-220). However, although there have already been some studies concerned with typomorphological issues in temple courtyards,

such as Sun (1992), Hsueh (1990) and Wei (1998), it appears that there has not yet been an argument regarding the interaction between courtyard typology and everyday social practice.⁴

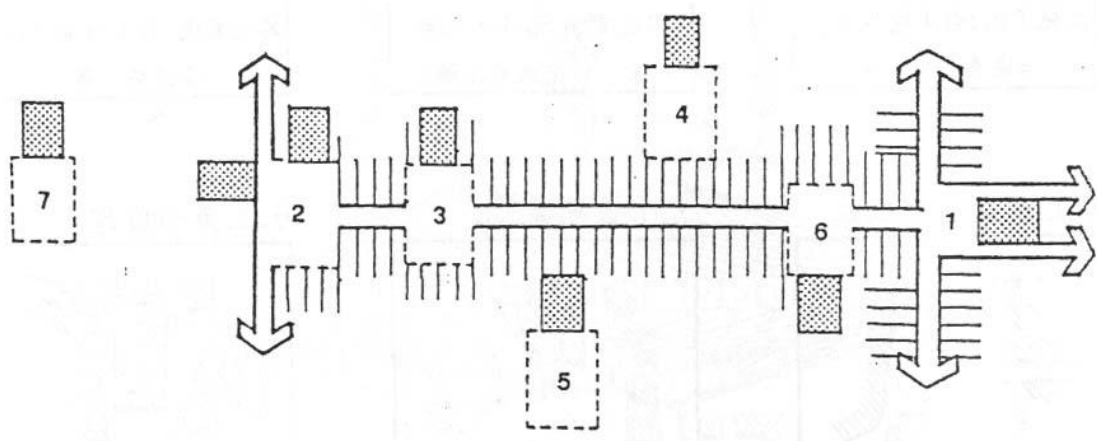


Figure 9.1 Seven types of temple courtyard (Sun 1992)

As can be noticed in the empirical observations, the most significant influences of a courtyard typology on everyday life, with respect to the combination logic of a temple courtyard and the connecting alleys, is probably the condition of pass-through traffic. The form of pass-through movements, in most cases, is directly influenced by the courtyard typology, and the resulting paths, quantity and variety of movements often have some impacts on other social practices in a temple courtyard space. For example, we can see that the Zonggan Temple courtyard, or courtyard Types 1 and 2 in Figure 9.1, have relatively diverse circulation of pass-through movements in the courtyard space due to the complicated connection pattern between the courtyard and alleys, while the circulation of pass-through traffic in the Yonghua Temple courtyard, or in courtyard Types 3 and 6, can cut the courtyard space into two parts for other daily appropriations. So the everyday neighbourhood social interactions, such as chatting and children playing, in these types of temple courtyard space are conceivably not as free as in Types 4 and 5, or the Haian Temple courtyard, the

⁴ The major concerns of Sun (1992) and Hsueh (1990) were the morphological and typological characteristics of temple courtyards, rather than appropriations. Although the study of Wei (1998) was interested in the appropriations of temple courtyards, he did not take into account the influence of material form in his discussion.

cul-de-sac type. This issue will be discussed further in Section 9.3. Through narrative specifics, we shall see how these spatial organization characteristics influence social practice in the making of everyday sense of place.

In addition, in the surrounding fabrics of the three case-study temple courtyards, the organization patterns of the surrounding building plots of the temple courtyards are noticeably different. The courtyard of Yonghua Temple is mainly enclosed by the flanking walls of buildings, while the courtyards of Zonggan and Haian Temples are enclosed by the fronts of neighbouring buildings. This condition has never been emphasized in any other studies of temple courtyard morphology as it has almost no influence on the shaping of the courtyard space. But it is influential in the everyday life-style of the courtyard space, because, in social practical terms, a space enclosed by buildings' fronts is probably preferable to a space enclosed by buildings' flanking walls. This condition will also be examined further in Section 9.3.

Moreover, in terms of the residential/commercial mixed-use condition of the courtyards' surrounding environment, there is a residential neighbourhood with some bars, cafés and restaurants next to Yonghua Temple (in the centre of the block) and a popular attraction in the Confucius Temple nearby (around the perimeter of the block); there are residences, bars and shops enclosing the courtyard of Zonggan Temple (in the centre of the block) with busy shopping streets and a traditional market nearby (on the perimeter of the block); and there is a simple residential neighbourhood surrounding the courtyard of Haian Temple (in the centre of the block) with some shops for basic local everyday life nearby (on the perimeter of the block). These morphological, typological and functional conditions of the temple courtyards' surrounding fabrics certainly have some influences on everyday social practices, as we shall see in the discussion which follows.

9.3 EVERYDAY SOCIAL PRACTICE IN THE TEMPLE COURTYARD

In this section, I shall discuss the interrelationships between the everyday appropriations and the surrounding typomorphological conditions which are summarized above. This discussion will help us to grasp some common features of everyday life in the interior of an urban block in central Tainan, and to understand the morphological factors that might influence the narratives of appropriation, so as to assist in identifying the value and significance of urban elements to everyday culture for the management of future urban change.

The subsequent discussions will start with an examination of the routinization of everyday life over 24 hours in the case-study temple courtyard spaces, and then elaborations of the findings will follow some noticeable categories of everyday appropriations. We have already identified some categories of appropriation that were considered to be important to the life of a temple courtyard in Chapter 8's examination of the one-day observations, and they included pass-through traffic, parking, visiting surrounding facilities, leisure and exchange. In order to have a proper discussion about the interrelations between the narratives and the morphology of an everyday space, some of them should be further subdivided. In this case, in the subsequent discussions, they will include pass-through traffic, parking, neighbourhood interaction, elderly people's and children's activities, commercial and service activities, which all happened with relatively high frequency or which offer significant stories of cultural appropriation of the space in the observations, so as to see the interaction between the everyday social practice and the morphology.

Time Fluxation of Cultural Appropriation

The daily cultural model of everyday appropriation of a temple courtyard space is substantially formed by some of the most significant common categories of social practice, including, as mentioned in Chapter 8, the movements of pass-through traffic, parking, visiting surrounding facilities, leisure and social exchange. These categories of social practice just reflect the principal morphological and functional conditions of a temple courtyard argued in the preceding sections. First, morphologically, a temple courtyard must be intimately integrated with the surrounding alley fabrics as part of the flow network. Thus the fact of finding many pass-through movements and parking activities in all the case-study temple courtyards was predictable and it appears that this condition, in most cases, could be found in the interior of every urban block in central Tainan. So the movements in the pre-modern alley fabric form a sub-network of traffic in the city centre, by contrast with the modernist grid communication network. Second, a temple courtyard provides the most important social space for the neighbourhood in the interior of a block. In the observations, we found many neighbourhood activities of leisure and social exchange, such as chatting, relaxation and children playing, in the temple courtyards. These everyday stories also indicate that the life-style in the interior of a block is generally influenced by the morphological condition of the space.

But the morphology of the space appears only to provide the social condition for the everyday stories to happen. It did not have much influence on the time-flux cultural model of daily appropriation. As can be understood from the event-time maps in Chapter 8, the most common movements and activities in the case-study temple courtyards occurred mainly in time sections 1 (7:00-12:00) and 2 (13:00-18:00) of the 24-hour observations, and in them the narrative specifics were rather different. During the day time, there were more students and visitors moving in the Yonghua Temple courtyard; the Zonggan Temple courtyard had many people passing through for grocery shopping; the Haian Temple courtyard appeared to be relatively conventional and almost entirely used by nearby residents. In the observations of time section 3 (19:00-0:00), the courtyard of Yonghua Temple was almost silent

except for a few people passing through; the courtyard of Zonggan Temple was crowded because of the seafood bar and the grocery store on the courtyard sides; the courtyard of Haian Temple had hardly any pass-through traffic but there were still many neighbourhood leisure activities intimately connected with the temple until 10pm. It appears that the time-flux cultural model of daily appropriation is mostly influenced by the functional condition of the urban block's surroundings, rather than the morphological condition of the block itself.

Interaction between Morphology and Everyday Life of a Temple Courtyard Space

Using the one-day narrative of social practice acquired in Chapter 8, I shall next examine some significant categories of everyday appropriation of the temple courtyard spaces so as to see the interrelationship between the occurrence of the everyday activities and the morphological condition of the temple courtyards.

Pass-through traffic

Since the temple courtyard spaces of central Tainan are typically part of the flow network of the alleys, it is inevitable that we should find some pass-through traffic. The paths of pass-through movements in a courtyard are very likely to be influenced by the courtyard morphology, especially, as mentioned earlier in Section 9.2, the combination pattern of a temple courtyard and the connecting alleys. As observed in Chapter 8, the variety of paths of pass-through movements in the courtyard of Zonggan Temple was much greater than that in the other two case-study courtyards. Then we can find that, morphologically, each corner of Zonggan Temple courtyard has one or more alleys that can lead to major streets outside the block, but the alley connections with the courtyards of Yonghua and Haian Temples are very simple. So this clearly suggests that a courtyard with a more complicated pattern of alley connections will result in greater variety of paths of pass-through movements.

As for the frequency of pass-through traffic, the Haian Temple courtyard had the least frequent traffic in the observations. The purpose of passing through a temple courtyard is mostly for taking a short cut by moving through the centre of a block to a particular destination, such as a school or a market. In the observations described in Chapter 8, we found many people with shopping bags passing through the courtyard of Zonggan Temple on a trip to or from a market, and we also found some students passing through the courtyard of Yonghua Temple on their way to or from school. These people did not move along the major streets outside the blocks because the paths along the alleys provided short cuts. Then we can find that the surroundings of Haian Temple are a relatively residential environment. So it was apparent that it had the least-frequent traffic in the observation probably because there was no need to pass through the centre of this block as a short cut to somewhere else. This finding indicates that the major factor that influences the frequency of pass-through traffic is probably the surrounding functional condition of the region, rather than the morphological condition of the urban block itself.

As Appleyard (1981) suggested, the level of traffic may influence the social relationship in the streets. It is important to be aware that both the variety of paths and the frequency of pass-through traffic can influence other social practices in the courtyard, especially the activities of the elderly and of children, as will be discussed later.

Parking

According to the observations in Chapter 8, parking, whether of a car or a motorbike, is a common activity in all three case-study temple courtyards. As observed, in the Yonghua Temple courtyard, during the day, especially from 12noon to 7pm, the space was frequently used for temporary parking by the visitors to nearby cafés and restaurants, and to the Confucius Temple, as well as by maintenance workers for neighbourhood services. But most of cars and motorbikes parked in the

courtyards of Zonggan and Haian Temples were owned by the owners/occupiers/tenants of surrounding residences, shops and bars. This difference in the user type of parking is perhaps not due to the regional functional conditions. It can be understood from the fact that there are also many cafés, bars, restaurants and a market near Zonggan Temple, but the visitors to these places did not consider parking in the courtyard of Zonggan Temple. According to the observations made for this thesis, the reason for this difference was possibly because morphologically the courtyards of Zonggan and Haian Temples are enclosed by the fronts of other buildings while the Yonghua Temple courtyard is mainly enclosed by buildings' flanking walls. As we can find in the observations, people normally did not park in front of someone else's home, but parked against a flanking wall. Accordingly, it appears that a temple courtyard enclosed by buildings' flanking walls will attract more visitors to park there, while a temple courtyard enclosed by buildings' frontages will be mainly used by the residents of the surrounding properties.

Visiting surrounding facilities and other commercial activities

According to the observations, the activities of visiting the surrounding facilities of a temple courtyard, including the temples, the restaurant on the courtyard side of Yonghua Temple and the seafood bar and grocery store on the courtyard sides of Zonggan Temple, had significant impacts on the everyday life-style in the interior of an urban block. For example, the people at the outdoor tables of the seafood bar on the temple courtyard daily during the evening dinner hours gave to the space a unique image of dining; while people who visited the temple parked their cars or motorbikes in the courtyard, used the incense burner in the courtyard, and had a chat or relaxed in the courtyard all used the courtyard space as part of the temple area. While the other activities such as pass-through traffic, parking, leisure and social exchange just made the courtyard space a meaningful place, these activities provide the courtyard space with a relatively specific cultural image of a place. So the conditions of these facilities were considerably important to the making of the sense of place of the temple courtyard space.

The everyday appropriation of the interior of a block can also be influenced by the regional commercial activity pattern. This can be understood from the everyday life observations of the case-study blocks. In the surrounding area of the Yonghua Temple block, there is an important cultural attraction in the Confucius Temple, and many cafés and bars that are popular with young people and students. Thus students and tourists were frequently seen in this temple courtyard space. There is a busy shopping street and a traditional market respectively on the north side and the south side of the Zonggan Temple block. Thus we found many people passing through the courtyard as a short-cut to the market. But we hardly saw any shoppers coming from the shopping street. It appears that the shopping-street shoppers were not interested in moving into the interior of the block. In the surrounding area of the Haian Temple block, there were only shops for basic local everyday life. Thus the majority of users of the temple courtyard were local residents, with some temple visitors. The composition of participants in the everyday appropriation of Haian temple courtyard thus appears to be relatively simple. These people, and the way they used the temple courtyard spaces, created the cultural uniqueness of each sense of place.

Accordingly, in the process of place making, the composition of the participants and the hours of crowdedness in the everyday appropriation of a temple courtyard in the centre of a block are often influenced by the surrounding functional context. As a result, although the neighbourhood in the interior of a block is morphologically isolated from the streets within an island, its everyday appropriation pattern still more or less links to the regional functional conditions.

Leisure and exchange: neighbourhood interaction

In the empirical observations, in the courtyards of Zonggan and Haian Temples, we captured a few neighbourhood interactions, including the activities of chatting, strolling and children playing, but

there were much fewer such neighbourhood activities happening in the Yonghua Temple courtyard. One of the most significant neighbourhood interactions captured in Yonghua Temple courtyard was a quick chat at 2pm in a chance encounter between three local residents. The reason for only a few neighbourhood interactions happening in the Yonghua Temple courtyard was probably also because of the orientation of the surrounding building plots. There is evidence for this presumption. In the observations, only people from elsewhere used the benches in the doorway of Yonghua Temple, the flowerbed side under the tree in Zonggan Temple courtyard and the open space in front of Haian Temple for social interactions, while residents of local neighbourhood tended to stay around the spaces in front of their houses for social interactions. So we found more neighbourhood interactions in the courtyards of Zonggan and Haian Temples (both are enclosed by the fronts of buildings) as they were at the same time using the spaces in front of their houses. The courtyard of Yonghua Temple is enclosed by buildings' flanking walls, and as a result we only captured a few neighbourhood interactions in the courtyard.

According to above discussions on the activities of parking and neighbourhood interaction, this thesis suggests that there is a significant influence on social practice in a temple courtyard caused by the orientations of the surrounding building plots. A courtyard enclosed by the fronts of buildings is normally used for parking by the residents of the surrounding buildings and has more local neighbourhood interactions, while a courtyard enclosed by buildings' flanking walls is often used for parking by visitors and has relatively fewer local neighbourhood interactions. It appears, then, that the courtyard typology of the former can stimulate a stronger local community consciousness, and the courtyard typology of the latter forms a relatively public sense of place.

Leisure and exchange: elderly people's and children's activities

As suggested earlier in the discussion about ‘pass-through traffic’, the condition of pass-through traffic might influence the activities of elderly people and children in the courtyards. This presumption will be examined next. During the day of observation in the Yonghua Temple courtyard, a number of elderly men, including a disabled man, were observed. The major activities of these aged people were chatting and visiting the temple. However, no children were observed, although there were some teenage students passing through this courtyard. During the day of observation in Zonggan Temple courtyard, there were also some elderly people observed while they were chatting. Nevertheless, during the day there was only one child observed at 7pm and 8pm while he was passing through the courtyard with a folding kick scooter. During the day of observation in Haian Temple courtyard, there were also some elderly people observed, including a disabled woman. The major activities of these aged people were sitting alone for relaxation, strolling, chatting and visiting the temple. In addition, there were many children observed in this courtyard. At midday, there were little children playing in the courtyard when their grandmothers were chatting nearby. Then at 4pm and 5pm there were many children of primary school age playing in the courtyard after class. Also, at 9pm, there were little children of visitors to the temple playing in the courtyard.

Accordingly, since there were many old people, including some disabled people, who could use the courtyards freely, the conditions for the activities of the elderly provided by the three courtyard spaces appear to be fine. Yet Haian Temple courtyard was much more popular with children than the other two temple courtyards. As mentioned earlier in the discussion of ‘pass-through traffic’, Haian Temple courtyard had the lowest frequency of pass-through traffic among the three. This could be an important factor in that the space is safer for children’s activities. Also, as mentioned in the discussions about ‘parking’ and ‘neighbourhood interaction’, Haian Temple courtyard is enclosed by the fronts of buildings and has a relatively stronger local community consciousness. With more frequent neighbourhood interactions, this space could be friendlier to children’s activities.

We can thus conclude that the temple courtyard in the centre of a block is generally available to be used freely by the elderly. But for children, a complicated pattern of connection between a courtyard and the connecting alleys will cause more varied paths of pass-through movements and is thus unfavourable for children's activities. A courtyard enclosed by the flanking walls of surrounding buildings, due to its a relatively less intimate sense of place with the neighbourhood, also provides comparatively less favourable conditions for children's use than a courtyard enclosed by the fronts of buildings.

Others: neighbourhood everyday services

Apart from the activities discussed above, there is an additional significant common activity in the use of the three case-study temple courtyard spaces. The participants in this activity are neither the local residents nor the visitors to the surrounding facilities, but those people essential for the regular everyday services of the neighbourhood, such as postmen, people for delivery (LPG cylinders, online orders, parcels and so on) and maintenance workers. These people move around the alleys in the interior of a block everyday by motorbike or mini truck, and sometimes use the temple courtyard for parking. Such events happen repeatedly daily and although their familiarity can often render them 'invisible', these people can be considered as part of important everyday culture of the alley spaces in the block interiors of central Tainan.

Summary: The Impact of Spatial Morphology on Everyday Social Practice in the Interior of an Urban Block

Based on the above discussion, we can grasp some of the morphological characteristics that may influence the everyday life pattern in the interior of a block in the making of an everyday sense of

place. First, the most influential morphological condition on everyday life is probably the interior/exterior contrast, and the residential/commercial heterogeneous pattern of an urban block. This contrasting condition of an urban block allows the temple courtyard in the centre of the block to be the social core of the neighbourhood and is significant to the making of the everyday sense of place of central Tainan. It also produces a heterotopic condition in the modernist alienated urban morphology, since it allows complex public issues (traffic, parking, and exchange) to happen secretly in the relatively quiet and private everyday spaces in the interior of a block and also allows traditional residential accretions to be maintained in the city centre's commercial district, as will be elaborated in the next chapter. In addition, the morphological characteristics mentioned in Section 9.1, including the islandization and alley network, are also essential morphological conditions for the formation of the uniqueness of the contemporary everyday urbanism of central Tainan.

Second, the regional functional condition of a block can influence the everyday life in the interior of the block. As elaborated above, it has direct influences on the frequency of pass-through traffic, parking, the composition of participants and the hours of crowdedness in the everyday use of a temple courtyard in the centre of a block, and has indirect influences on children's activities, including their safety from traffic. Since the regional functional condition of a block can influence the everyday life in the interior of a block, the everyday life pattern in the blocks of central Tainan are more or less different from each other. Yet as mentioned in the section 'Time fluxation of cultural appropriation', the everyday use of each space practically and substantially follows a pattern related to the movements of pass-through traffic, and the activities of chatting, strolling and recreation. So it is conceivable that the differences caused by the regional functional condition happen within specific spatial conditions. In this case, the everyday appropriations of urban blocks in central Tainan form a unique and fascinating common everyday sense of place with diverse daily tactics.

The morphological condition of the orientation of the surrounding building plots of a temple courtyard also has an impact on the everyday life in the interior of a block. A courtyard enclosed by the fronts of buildings can stimulate a stronger local community consciousness, and a courtyard enclosed by the flanking walls of surrounding buildings forms a relatively public sense of place. The former typology of courtyard space has more neighbourhood interaction and is relatively friendly to children. Finally, because the combination pattern of a courtyard and its connecting alleys influences the variety of pass-through movements, a courtyard with a simpler combination pattern appears to be friendlier to the neighbourhood and to children. Since these morphological characteristics have various impacts on the everyday sense of place and are important to the formation of the contemporary everyday urbanism of central Tainan, they must be always taken into account in the management of future urban change.

HETEROTOPIC URBANISM AND THE MANAGEMENT OF URBAN CHANGE

Based on Tainan's morphological and everyday social characteristics discussed in Chapter 9, this thesis concludes by arguing that the urban blocks of central Tainan can be considered as urban heterotopias. Since the postcolonial city of Tainan is not completely modernist alienated nor traditionally accreted, it is multi-faceted in both morphological and social terms. The city thus should not be managed, planned and designed through either a rationalist approach or a conventional approach of conservation, because the value of the everyday life of the city does not reside in either the modernist urban social structure or in the pre-modern history alone. Understanding certain parts of the city fabric as a kind of heterotopic condition will help us to grasp the value of the space to contemporary everyday life that resides in a state of tension or conflict and cannot be readily explained through the regular analytical frameworks. In this sense, the idea of the heterotopia is not only a way out of the alienation but can also contribute to the project of urban conservation and the management of urban change for the postcolonial city.

The concept of heterotopia is often a useful tool for the examination and analysis of the complexity of contemporary urban structure and the resulting everyday social practice. The urban theorists Shane, Dehaene and De Cauter's concepts reviewed in Chapter 4 serve as examples. This chapter will explain how this discussion can help inform an understanding of central Tainan's urban structure and everyday life. Through the discussion, we shall grasp the principles of the production of the postcolonial city's contemporary sense of place that are important to the management of urban change.

In the subsequent elaboration, in Section 10.1, I aim to explain why the blocks in the city centre of Tainan can be considered as heterotopias. Along with this explanation, the principles of the management of urban change will be identified. Section 10.2 will link up the management principles derived from the concept of heterotopia with the concepts of urban conservation and the protection of senses of place, so as to suggest planning and design principles for future city development. Following the presentation of my suggestions for managing this urbanism, the overall conclusion will be set out in Section 10.3 to review the usefulness of this thesis's interdisciplinary approach to urban change.

10.1 POSTCOLONIAL HETEROTOPIAS OF CENTRAL TAINAN

In Chapter 9, through the discussion of the interaction between typomorphology and everyday social practice in central Tainan, we have grasped the key features of the urbanism in the city. The most important material structural element of central Tainan is the urban block developed by the process of the Japanese Haussmann-like urban reformation. In the interior of such a block, pre-colonial labyrinthine alley fabric can always be found. The perimeter spaces of the block are mostly developed commercially. By following the alleys and walking into its interior spaces, typically, one can encounter a quiet residential neighbourhood. In this neighbourhood, there is often a small temple with a courtyard in front of it and that serves as a significant public space for social interaction in the interior of the block.

With respect to the urban social structure, the everyday society of a block in fact resides in an islandized enclave of isolation. Due to the planning of *ding-a-ka* spaces on the perimeter of a block and the resulting commercial activities, an urban block of central Tainan always has clearly featured edges, and that discontinues the connection of its interior residential society with the neighbourhoods

inside the nearby blocks. But, as a consequence of this heterogeneous mixed-use social spatial feature of the city centre, the residents of such a block have a very convenient everyday life style as they can easily find amenities and services, and reach their workplaces. Then the residents of a block use the temple courtyard space as the centre for social activities and the labyrinthine alley network for moving around. With its flows of traffic, the inter-block alley network recombines the islandized enclaves of central Tainan to form a relatively coherent condition of urbanism. Following the morphological and everyday cultural conditions summarized above, there are many aspects of the city's social spatial characteristics that lead us to consider this postcolonial urbanism to be founded on heterotopic principles.

Principles of Urban Heterotopias

Single-core society of exception

Because of the islandized morphological condition in the city centre of Tainan, the most noticeable unit of everyday urban society is the neighbourhood of a block. In functional terms, the perimeter spaces of such a block are normally occupied by commercial activities, while its interior is occupied mainly by residential accommodation. In this case, within the commercial zones of central Tainan, the residential neighbourhood in the interior of a block appears to be a retreat away from the bustle of the world. Since the surrounding commercial facilities can satisfy all kinds of basic everyday life demands, such a neighbourhood appears to be self-contained. In addition, as a temple courtyard in the interior of a block provides a significant space for neighbourhood interaction and social exchange, there is a powerful social core of the neighbourhood's everyday life in a block. Accordingly, the neighbourhood inside a block forms an islandized, distinctly-edged, self-contained, heterogeneous, and single-core society.

Because of the social spatial feature and the labyrinthine alley morphological condition described above, the urban blocks of central Tainan are distinct from the blocks of the other areas in Tainan in morphological and socio-cultural terms. In other words, in the overall urban social structure of Tainan, these single-core societies in the blocks of central Tainan are unique and can be considered to be exceptional. Therefore, the joint area of such blocks of central Tainan should be treated as a special cultural zone in urban management. According to Shane, a single-core, self-contained enclave with a unique culture of exception in a city, for example a historical conservation zone, a gated community, a palace or a university campus, can be understood as a (crisis) heterotopia (2005: 247-250). Thus this thesis argues that the contemporary social spatial structure of central Tainan has formed a unique cultural area of heterotopias. Due to its socio-cultural uniqueness, this area must be conserved for cultural continuity. Although, in this area, the contemporary everyday social spaces are separate from the traditional historic value of urban constitution resulting from the colonial past, their postcolonial socio-cultural value of today which constitutes the unique heterotopic urbanism should be taken into account in the management of urban change.

The illusion of pre-colonial everyday society

As mentioned above, in central Tainan, the everyday socio-cultural pattern of the neighbourhood in the interior of a block resides in the unique labyrinthine alley fabric and the temple courtyard space. By contrast with the modernist grid urban system of the Japanese reformation on the exterior of a block, the alley fabric in the interior of a block appears to reflect the morphological characteristic of the pre-colonial society of Tainan. This suggests that the production of a contemporary sense of place in the interior of a block, founded on the pre-colonial fabric, is dominated by the traditional everyday social spatial structure. In fact, with its pre-colonial fabric, this type of block and the resulting sense of place cannot be reproduced even by following the typological rules because the design will be historically meaningless in social practical terms. So there is a need for conservation. In order to

conserve this sense of place that is dominated by the traditional everyday social spatial structure, the 'illusory image' of pre-colonial society that dominates the production of this sense of place must be maintained in any future change of social spatial structure in the city centre of Tainan. In other words, the alley fabric inside a block allows people in the postcolonial modern city to perceive something of the traditional, such as the experience of alley movement, and thus it acts as a kind of illusory mirror reflecting a pre-colonial sense of place to contemporary society. This illusory domination of the sense of place has to be conserved and it also results in the consideration of the place as a heterotopia.

Foucault indicated that the role of illusory heterotopias is 'to create a space of illusion that exposes every real space, all the sites inside of which human life is partitioned, as still more illusory' (1986 [1967]: 27). In other words, the domination of illusion allows the social practice to move beyond rigid social codes in the heterotopic enclave. Yet as Shane suggested, this freedom of social practice is dominated by 'illusion' codes for maintaining the shifting balance of images and values within an urban system (2005: 259-260). That is to say, the freedom of social spatial transformation must follow the place-making principle controlled by an illusory theme. For the urban block of central Tainan, the theme, as elaborated above, refers in practical terms to the pre-colonial society. Therefore, the aim of conserving this sense of place in the interior of a block is the protection of the contemporary socio-cultural context of the morphology founded on the illusory image of pre-colonial traditional social spatial structure, rather than the simple preservation of historical architecture. That is to say, buildings that do not have significant historical values can be redeveloped freely as long as the traditional social spatial structure and the visual coherence of landscape context can be maintained. To be precise, a conservation project must allow the existing cultural experience in the alley fabric that reflects the traditional society to be sustained in future urban design. Following this heterotopic principle, the future development of central Tainan must allow the everyday life in the interior of a

block to continue to reside in the balance between the postcolonial environmental context (the islandized condition) and the pre-colonial socio-cultural background.

The tension between functionalism and freedom

Because of Taiwan's colonial past, the urban structure of Tainan is mainly organized by a system of functionalist grids and circuses. The purpose of the urban reformation plan carried out by the Japanese in Tainan was not only for efficient military control, but also for the improvement of residents' health and of traffic mobility in the context of a labyrinthine living environment. As we have seen, the gridded urban plan introduced by the Japanese, radically restructured the pre-colonial urban fabric and established a series of traditional society enclaves.

However, these enclaves are not unified products, especially in social practical terms, although they do have similar typological characteristics. Although substantially there is a common pattern of everyday use of the social spaces in a block of central Tainan, as found in Chapter 9, the use often reflects the respective regional functional condition surrounding the block. This analysis implies the ways in which people using the blocks are different to a degree, according to a particular pattern. Also, although all the blocks of central Tainan are zoned for commercial development, in practice the residential and commercial activities of a block were developed freely and thus the mixed-use characteristics of the blocks can make them very different from each other. In other words, the everyday stories of the neighbourhoods inside the blocks are varied, although they have similar morphological, functional and socio-cultural backgrounds. A heterotopia can be an anarchistic society that allows free developments protected by a functionalist envelope disguised as part of the ordinary in the city (Dehaene and De Caeter 2008: 3). Therefore, the great variety of everyday life stories hidden by the ordinary-looking functionalist block in central Tainan can be considered to be founded on this heterotopic social principle.

Following the heterotopic principle, a tension between functionalism and freedom can be found in the city centre of Tainan. Although the blocks of central Tainan are systematically dominated by the functionalist structure and have similar morphological and socio-cultural backgrounds, the everyday society inside the blocks continues to develop freely and reflect the respective regional functional conditions. This heterotopic principle suggests that the value of the flexibility of everyday social practice in the interior of a block must be maintained in the management of urban change for cultural continuity, so as to protect the capacity for cultural diversification of the postcolonial city when conserving the everyday sense of a place.

Blurring of public and private distinction

In a heterotopic society, the distinction between public and private in the space is typically ambiguous. As Dehaene and De Cauter (2008) noted, a heterotopic public space often harbours the reoccurrence of privatization. This heterotopic principle is similar to the concept of tension between functionalism and freedom elaborated above, since both are concerned with the tension between an authoritarian system and an anarchist society. As a heterotopia, blurring of public and private distinction can certainly be found in the everyday appropriation of the social core space – the temple courtyard – in the interior of a block in central Tainan.

A temple courtyard space was produced for activities associated with the temple in the pre-colonial society. It was not only the most significant public space of neighbourhood social interaction, but also served as a coherent part of the alley circulation network. Thus, the intrinsic social condition of a temple courtyard clearly made it a space for everyday public use. However, due to the colonial urban reformation of islandization, the temple courtyard space of today appears to be privatized. By contrast with the commercial public activities on the perimeter of a block, the residential neighbourhood

spaces in the interior of a block are relatively private because the user types are quite regular, as will be elaborated below in 'Insider and outsider'. Also, in contrast to the colonial gridded urban plan, the labyrinthine alley spaces in the interior of a block are secret from outsiders. As found in the observations, there was a couple coming from elsewhere for a surreptitious date in the courtyard of Zonggan Temple at midnight. This story implies that, compared with other types of open space in the city, the temple courtyard hidden in the centre of a block is a relatively private public space. This ambiguous characteristic of private and public in the appropriation also results in the consideration that the temple courtyard is heterotopic in social practical terms.

Insider and outsider

Due to the blurring of the public and private distinction elaborated above, the public space in the interior of a block is not as open as most of the other open spaces in the city, such as a street or a park. According to the exploration in Chapter 8, substantially, the basic actors participating in the appropriation of the everyday space in the interior of a block are regular. In general, they include the temple staff, nearby residents and workers of nearby commercial spaces or students of nearby schools. Outsiders, people who do not regularly belong to this social sphere, can be easily distinguished. In this circumstance, the neighbourhood always has a consciousness of community security. In the everyday observations carried out for this thesis, we could frequently distinguish between insiders and outsiders according to their ways of appropriation. Because regular users of the everyday spaces in the interior of a block often knew each other, they would normally have some interactions when encountering one another. For example, at 2pm during the day of observation in Yonghua Temple courtyard, three people, comprising two residents and an artist who had a studio nearby, encountered one another in the courtyard and had a short chat. In addition, many local residents already considered that the everyday spaces in the interior of a block were very private and safe. For example, in the observation of Haian Temple courtyard, we saw a woman wearing pyjamas and slippers walking from her home

across the courtyard to the temple; in the same temple courtyard, we also found primary school children of nearby residents playing around without any adults at their sides.

The neighbourhood social space in the interior of a block, with the characteristics of clear islandized boundaries, privatized public spaces and the condition that outsiders are easily distinguishable, results in a strong consciousness of community security. According to Setha Low (2008), a social space with such characteristics can be understood as a heterotopia. Just like a hospital, the society is not only protected by physical boundaries, but also by a special syntax that strengthens the sense of sanctuary. This heterotopic socio-cultural characteristic indicates that the social spatial structure in the interior of a block keeps crime low in central Tainan. Therefore, to ensure cultural continuity and the protection of this low-crime environment, the following heterotopic principles must be taken into account in the management of urban change: the conservation of the labyrinthine alley fabric to keep the secret environmental sensitivity towards outsiders, the maintenance of the private sphere of neighbourhood public spaces, and the context that allows frequent neighbourhood interaction.

Islandization and coherence

As a consequence of the Japanese urban reformation, the urban structure of central Tainan has been shifted from a state of relatively coherent urban fabric consisting of historically accreted urban elements to a fragmented condition of islands and enclaves. It is important to be aware that contemporary cities are almost always assemblages of fragmentary spaces and that it is practically impossible to return to the traditional syntax of urban fabric (Graham and Marvin 2001: 112). In other words, the city of today is increasingly structured by islandized elements that are by definition disconnected from each other, and this fragmented condition appears to be an inevitable trend of contemporary city development. In addition, the everyday social structure of the contemporary city is also in a state of separation. This fragmented social condition of everyday life is termed by Lefebvre

as 'alienation' (2008 [1947]). The issue of alienation is mainly caused by the modern life-style, the contemporary fragmented spatial structure and the functionalist zoning system.

However, the social structure of central Tainan appears to be not completely alienated. The city centre is zoned for commercial development. Yet since the labyrinthine alley spaces are not favourable for commercial activities, the interior of a block is relatively residential while the perimeter spaces are occupied by commercial activities. Due to being located in the commercial city centre, it is very convenient for the residential neighbourhood inside a block to find amenities and services, and to reach their workplaces. Thus, this heterotopic living condition that allows a traditional residential neighbourhood to be sheltered by a functionalist block in the commercial city centre results in a heterogeneous social condition, and that opposes the separation of everyday life. Moreover, although the urban structure is in a fragmented condition of islandization, the circulation in the inter-block labyrinthine alley network reforms a relatively coherent state for the islands. As can be understood from the morphological maps in Chapter 7, if we only explored one single block, we would be unable to observe the fascinating morphological characteristic of alleys running through one block to another. Therefore, this postcolonial city is not completely alienated. Instead, its character resides in the tension between social separation and heterogeneity, with the coexistence of islandization and coherence.

Incubation of Heterotopic Urbanism

According to the above explanation, the urban structure and everyday life of central Tainan are not completely separated and nor fully determined by the functionalist urban plan. Even so, they also do not have the coherence of the traditional pre-colonial city. They are heterotopic and coexistent. Due to these heterotopic principles, the postcolonial social spatial structure of central Tainan is exceptional

and unique, and that allows the tension between functionalism and freedom, the blurring of public and private distinction, and the coexistence of fragmentation and coherence. These principles should be considered to have a catalytic effect on urban change, in that they function as a kind of model which serves as an incubator of the existing sense of place for future urban growth in the city centre of Tainan. This incubation idea refers to the potential for an urban fabric to sustain valuable everyday practices and material traits in viable and dynamic ways and that is almost never considered in the conventional urban conservation approach. But, as this thesis argues, it must be taken into account in the management of urban change in Tainan so as to protect the sense of place and the unique everyday urbanism of the city.

10.2 PRACTICAL CONSIDERATIONS IN URBAN CHANGE MANAGEMENT

Finally, we shall summarize the heterotopic principles elaborated in the preceding section for the management of the sense of place of central Tainan so as to suggest some ideas for urban conservation practice.

Sense of Place of Central Tainan

The purpose of urban conservation is to protect the existing urban cultural landscape and the sense of place. Typomorphological study works as an effective tool for grasping the historical and social values of urban structure so that we can suggest appropriate principles for urban conservation practice. For helping the cultural continuity of the city, these principles will indicate, in future urban change, what can be changed, what must be preserved, and how much can be changed. As mentioned at the

beginning of this thesis, because of the colonial background of Tainan, the value of the urban structure in future development being only determined by the study of historical geography seems to be disputable. This sense of misgiving leads this thesis to take into account the interaction between typomorphology and the social structure of everyday life, so as to grasp the socio-cultural context of contemporary everyday spaces. By this means, we can have a better understanding of the value and significance of urban structure and element to both the historical tradition and the contemporary everyday sense of place.

Through this approach to the management of urban change, for urban conservation practice, we must not only grasp the typomorphological characteristic of central Tainan, but also understand the role of the urban element in contemporary everyday society. The sense of place, as suggested in Chapter 2, is not only produced by the historical and traditional values of urban morphology, but also resides in the contemporary cultural model of everyday appropriation. Thus, in terms of the protection of the sense of place, the value of the urban structure of central Tainan will be concluded respectively through the dimensions of historical context and everyday social practice.

Historical geographical context

In terms of morphological study, we do not emphasize the preservation of historic elements such as Chihkan Tower, the Confucius Temple and ancient city gates and walls, but the conservation of the social-historical value of ordinary everyday spaces as they are supported by the structure and grain of the city fabric. Certainly, this is the main conceptual discrepancy between typomorphological-based urban conservation and conventional historic architectural preservation. According to the exploration undertaken in this thesis, the most significant morphological element to the production of a sense of place in central Tainan is the urban block typology formed by the colonial urban reformation and the pre-colonial labyrinthine alley fabric. More importantly, with a temple courtyard as the social core, the

residential everyday spaces in the interior of a block and the perimeter's commercial activities form a noticeable contrast in the block structure. In order to maintain this morphological characteristic in the block typology for the protection of the sense of the place, there are some structural elements which must be taken into account in conservation practice. Surrounding the block, the linear structure of continuous *ding-a-ka* spaces, introduced in the Japanese Colonial Period, is one important historical element. It stimulates commercial activities to happen on the perimeter of a block and thus is one essential element in forming the block typology. Also, the pre-colonial labyrinthine alley fabric and the temple courtyard space in the interior of a block must be conserved so as to maintain the heterotopic social spatial context. In other words, the actions of further subdividing a block, reshaping an alley, homogenizing the functional condition of a block, and any developments that can change the block typological context should be prevented.

Everyday social culture

The social, spatial and morphological characteristics that can be considered important to the making of the contemporary everyday cultural model of central Tainan include the connecting patterns between a temple courtyard space and the alleys in the interior of a block, the integrity of neighbourhood social spaces, and the coherence of inter-block alley networks. They are essential morphological characteristics to structure the heterotopic urbanism of central Tainan. The existing connection pattern between a temple courtyard space and the alleys in the interior of a block must be conserved so as to protect the existing cultural model of everyday appropriation, including movements in the alley network and social interactions in the courtyard. It is also very important to protect the capacity for the diversification of everyday social practice, as freedom within the functionalist block is one essential condition for heterotopic urbanism. Then conserving the integrity of neighbourhood social spaces will allow frequent neighbourhood interaction and be helpful for the maintenance of the privatized characteristic of public spaces in the interior of a block so as to ensure the continuity of the

low-crime environment. In addition, in this heterotopic urbanism, it is essential to maintain the coherence of inter-block pre-colonial alley networks. This will allow the continuity of the everyday cultural model in which residents move around the city centre by the alley networks, so as to conserve the heterotopic everyday life style.

Urban Conservation and Management

In practice, it is necessary for the management approach to urban change in central Tainan to be exclusive and different from other areas of Tainan. Because this is an exceptional area of heterotopic social spaces, ordinary approaches are unable to take care of the unique context. In addition, the interior and perimeter areas of an urban block in central Tainan should be controlled by different urban systems for the maintenance of different senses of place. In principle, the exterior spaces of a block must be able to help the continuity of regional commercial activities and the protection of the urban cultural landscape; the interior spaces of a block must be able to conserve the traditional living quality of the alley environment and the everyday socio-cultural context.

Furthermore, since this thesis considers the principle that allows the flexibility and diversification of everyday appropriation, we shall not go so far as to propose rules for the future development of a particular block – the society of a block can develop freely in response to the typomorphology of the block and the existing socio-cultural context. What we must, however, consider is that since the existing pattern of everyday use of public spaces in the interior of a block always reflects the regional functional condition of the block, the planning and management of a block should therefore take into account the surrounding environment. For example, the Yonghua Temple block is located near Confucius Temple and a number of schools, so tourists and students can often be found in the interior of the block, while the Zonggan Temple block is located in a highly commercial area, so there are also

some commercial activities occurring in the interior of the block. These people and activities influence the characteristics of appropriation and thus must be considered in the management of spatial development in the interior of the blocks.

Also significant, as mentioned in Chapter 9, are the ways in which the everyday uses of the public spaces in the interior of a block are different to a degree under specific cultural and urban conditions. For example, in the Yonghua Temple courtyard, there were more parking activities by people from elsewhere due to the courtyard typology and location of being near a tourist attraction, whereas in Zonggan Temple courtyard, the pass-through traffic is rather frequent and diverse due to the alley network pattern and commercial location, while in Haian Temple courtyard, the most children can be found because the syntax allows better neighbourhood interaction and privacy to form a relatively safe environment (detailed discussions on these points were elaborated in Chapter 9). Because of these differences, it is advisable that the management approach to each block should be adapted to a particular environmental condition and the everyday life characteristic of the local neighbourhood.

A practical planning and design approach will be suggested here so as to bring this thesis full circle. First, the area of central Tainan in which urban blocks contain labyrinthine alley fabrics should be zoned for cultural conservation. In this area, urban design regulations for the protection of the block typology, including the developing principles of both exterior and interior spaces, should be made for future designs to follow, so as to ensure the continuity of the morphological foundation for heterotopic urbanism. The fitting of *ding-a-ka* spaces on the perimeter of a block is already controlled by current urban planning law. But the building massing is in need of control to conserve the existing context and the sense of place. In addition, the exterior and interior spaces of a block should be controlled by different systems, not only for the material environments, but also for the functional conditions, so as to protect the contrasting condition of social spatial structure. This means that the interior spaces of a

block should be zoned for residential or low commercial development, while the perimeter plots are zoned for highly commercial development. As for the management of flexibility and diversification of everyday appropriation, participation is probably the most appropriate approach because it allows the development to follow the uniqueness of their cultural experience, rather than to be strategically unified by any particular cultural model. Most importantly, the principles of these management, planning and design procedures must follow the existing typomorphological and socio-cultural contexts for the incubation of heterotopic urbanism so as to conserve the everyday culture and the sense of place of central Tainan.

10.3 CONCLUSION

As this study of a vital issue for Tainan comes to an end, I shall conclude the thesis here with a broader review of my approach to urban change. This thesis proposes an interdisciplinary approach that takes into account the concepts of urban conservation, typomorphology and studies of everyday life for my project, and this approach is mainly concerned with the analysis of the existing everyday ordinary environmental context for the management of future urban change. In fact, nowadays, more and more architects and urbanists, such as Steven Harris and Deborah Berke (1997), have become aware of the importance of architectural and urban design being founded in the ordinary landscape context which developed from history to contemporary everyday life, instead of in iconic ideas.

The study described in this thesis was motivated by the awareness of the limitation of urban conservation practice which, when considering urban conservation as an approach to urban change, helps to protect the sense of place derived from the historical or traditional cultural contexts of urban fabric, but omits to consider the sense of place generated by the contemporary everyday life-style. But

the latter is often as important as the former for the management of urban change, especially in a postcolonial city such as Tainan, or a city with a complicated historical cultural background. In this case, in order to protect the sense of place in the city centre of Tainan, understanding the interrelationship between everyday life and urban morphology is as important as identifying the historical value of urban fabric. This consideration has led to the formation of my approach to urban change. It is founded on the study of typomorphology and at the same time involves empirical observation of everyday spatial appropriation for understanding the cultural value of urban fabric to contemporary everyday life, in order to develop the foundation for principle-making in terms of urban change management. This approach helps us to grasp not only the historical value of traditional urban fabric, but also its significance in serving as an incubator of the various senses of place.

Through such an approach, the aim of this study is to provide a better foundation for the management of future urban change in Tainan than the conventional urban conservation approach does. This thesis grasps not only the historical value of urban morphology in the city centre of Tainan, but also the typological character of everyday space, the cultural model of appropriation and the resulting heterotopic condition of an everyday society. Some of the suggestions made in this thesis for the management of urban change appear to be similar to the results of conventional urban conservation study, such as the argument of conserving the traditional alley fabric. This thesis emphasizes not only the historical value of this fabric, but also its key factor for the incubation of contemporary everyday urbanism. They reside in the relationship between the modernist urban block and the traditional alley fabric, the residential and commercial contrast condition, the tensions between inside and outside, private and public. In addition, many of the everyday spatial appropriations in my empirical observations can also be considered in the place-making process for the maintenance of everyday urbanism, such as the impact of the surrounding building context of a temple courtyard (for instance, whether it is enclosed by the flanking walls or the fronts of the surrounding buildings) and of the

regional functional condition of the cultural model of everyday life in the interior of an urban block. Evidently, this approach can properly help to maintain the everyday urbanism founded on the traditional urban fabric for the protection of a sense of place. That is to say, the proposal will thus allow the conservation of the sense of place not just on the grounds of its historical value, but for the survival of its unique everyday urbanism.

The cultural pattern of everyday life is not constant, as it follows social change. This condition implies that, unlike conventional views of historical value, the value of urban fabric to contemporary everyday life may change. Therefore, the everyday appropriation must be regularly tracked so as to keep updating the management approach to urban change.

Finally, I shall summarize something of the most significant contribution to relevant studies from this thesis for the consideration of further studies.

Archive of Tainan

This thesis has developed two series of useful archives that can be taken into account by relevant studies in the future. One series is the morphological mappings of the formation and transformation of the city centre of Tainan, and the other is the video narrative materials following one day in the lives of three temple courtyards recorded in 2007. These archives, forming the core of the discussion in this thesis, provide not only the background for the consideration of future urban change, but also the principle of place-making in urban design practice. More importantly, they have laid a solid foundation for future studies concerned with the issues of urban morphology and the everyday life of Tainan.

Approach to Urban Change for Further Studies

In the formation of urban theory, this thesis considers the theories of urban conservation and urban morphology on the one hand, and takes the Versailles School's typomorphological concept as a foundation for developing the approach to the interaction between urban morphology and everyday life on the other. Methodologically, morphological mapping, time-geography and visual narrative are the major techniques used for grasping the historical geographical and everyday social characteristics of space. Such an approach has the potential to be operated repeatedly. It can be readily employed for studies that aim to explore these two issues:

Tracking of the interrelationship between urban morphology and everyday life in Tainan

Since the cultural model of everyday life follows social change, the approach to urban change must be updated regularly. Some principles in the follow-up studies may substantially continue unchanged, especially the morphological background rooted in the chronic historical geographical transformation of the city. But the regional functional condition and everyday cultural context of appropriation must be re-examined regularly. Continuous empirical observation can help planners to understand the changes in the everyday cultural experience, so as to suggest appropriate approaches to urban change for the everyday urbanism. In operational terms, it is suggested that these studies should continuously observe the everyday lives identified in the three case-study urban blocks observed in this thesis, or to explore the everyday life conditions in other urban blocks in the city centre of Tainan.

Comparative urbanism of postcolonial cities

The postcolonial urbanism of Tainan grasped by this thesis also provides the foundation for comparative studies of urbanism in Tainan and in other postcolonial cities. The approach developed in this thesis can also be used to generate an understanding of the interrelationship between urban

morphology and everyday life in other postcolonial cities, especially those which have similar colonial backgrounds to Tainan; cities with the issue of colonial modernity. They can be Seoul, another Japanese colony in the early 20th century, or the former British colonies Singapore and Hong Kong. While these cities have not experienced the Haussmann-like urban reformation to which Tainan was subjected, their own modernizations of social and spatial structures are also founded on colonial backgrounds. It will be worth exploring the ways in which their contemporary everyday lives survive in the complicated postcolonial social spatial conditions, as well as how their urban planning and design strategically respond to these issues.

Returning to the methodology of this thesis, for the empirical observation of everyday life, it is very flexible in operational terms. The target is to grasp the sense of place through the observation of everyday life. The methodology which this thesis employed was to capture a one-day story of a place by third-person view through a fixed-position camera, because I was interested in the everyday life of a specific location, the temple courtyard. Depending on the aim of a study, it is also possible to use the first person narrative. The researcher would participate and experience local everyday life and at the same time record the movements and events of him or herself for analysis of the sense of place. Such an approach can be found in Pink (2008), as explored in Chapter 5. Alternately, the researcher can follow and record the everyday movements and events of specific people. Each methodology has advantages and disadvantages. Therefore, it is advisable to find the most appropriate methodology for a project of further study.

APPENDIX¹

Appropriation of Yonghua Temple Courtyard: Section 1 (7:00-12:00)

7:00-7:05

At the beginning of this period, a man who looked like a local resident walked across the courtyard. Then nothing had happened until a visitor (a), as shown in the snapshots captured at 7:04:30, 7:04:40, and 7:04:50 in Figure Ap.1, came out from the temple to worship in front of the incense burner. As the footage did not capture him when he moved in, he appeared to be already in the temple by 7am. While he was worshipping, a man (b), as shown in the snapshots captured at 7:04:30 and 7:05:00, parked his motorbike in the far left corner outside the artist's studio. There were already some motorbikes parked in this corner. According to the all-day observation, as we shall see, some motorbikes were parked in this corner for all 24 hours, and they appeared to belong to the next-door residents of the temple.



7:04:30 (code 1)



7:04:40 (code 1)

¹ Please refer to Section 5.2 for the background of empirical observation.



7:04:50 (code 1)



7:05:00 (code 1)

Figure Ap.1 Snapshots: code 1 (7:04:30-7:05:00) (referring to Figure F)

8:00-8:05

Five motorbikes passed through this courtyard during this five-minute period, with three of them carrying children (c), as shown in the snapshot (8:00:30) in Figure Ap.2. They were going to school, as the children were wearing school uniforms. In addition, at 8:05:00, the temple administrator (d) walked across the camera's view with cleaning materials, and she might have just finished cleaning the temple.



8:00:30 (code 2)



8:05:00 (code 3)

Figure Ap.2 Snapshots: codes 2 (8:00:30) and 3 (8:05:00) (referring to Figure F)

9:00-9:05

During this period, there were two individual women pedestrians and one motorbike passing through this courtyard.

10:00-10:05

Nothing happened except for a motorbike passing through this temple courtyard.

11:00-11:05

Apart from two individual women pedestrians and one motorbike passing through this courtyard, during this period, there were two people (e), as can be seen in both snapshots in Figure Ap.3, who looked as if they were from a space-planning company, observing this temple courtyard's material form. They kept looking around in the space and taking photos all the time.



11:00:20 (code 4)



11:00:30 (code 4)

Figure Ap.3 Snapshots: code 4 (11:00:20-11:00:30) (referring to Figure F)

12:00-12:05

At the beginning of this observation, there had already been a mini-truck parked in the courtyard for delivering a home appliance, and the workers were elsewhere in the surrounding neighbourhood. Clearly, with all the narrow alleys, this courtyard provided a good parking space for these workers. Then there were three motorbikes successively parked against the left-hand side wall. Two of them (f

and g) were shown in the snapshots captured at 12:01:20, 12:01:30, 12:02:00, and 12:02:50 in Figure Ap.4. These people left this courtyard immediately after parking for around 1-2 hours and were very likely to be the visitors to Confucius Temple or the nearby eateries (their motorbikes can still be found in the shot taken at 1pm, as we shall see, but not in the shot taken at 2pm). Also, in the snapshot captured at 12:02:00, there was a backpacker (h) who had left the temple. Then in the snapshot captured at 12:02:50, many events can be found: a lady (g), one of the bikers mentioned above, had parked and was leaving for elsewhere; a worker (i) was going back to the mini-truck; a woman with a helmet (j) was walking into the courtyard; two motorbikes (k) were passing through the courtyard and one of them was delivering liquefied petroleum gas (LPG) cylinders (there is no liquefied natural gas (LNG) pipeline system in Tainan, so residents need to order LPG cylinders from local domestic LPG suppliers and they are usually delivered by motorbike). One minute later, as shown in the snapshots captured at 12:04:10 and 12:04:20, the woman with the helmet (j) moved towards her motorbike while the truck was leaving, and at the same time, one more motorbike (l) came to find a parking space but failed and left.



12:01:20 (code 5)



12:01:30 (code 5)



12:02:00 (code 6)



12:02:50 (code 7)



12:04:10 (code 8)



12:04:20 (code 8)

Figure Ap.4 Snapshots: codes 5 (12:01:20-12:01:30), 6 (12:02:00), 7 (12:02:50), and 8 (12:04:10-12:04:20) (referring to Figure F)

Appropriation of Yonghua Temple Courtyard: Section 2 (13:00-18:00)

13:00-13:05

By 1pm, as can be seen in the snapshot captured at 13:01:00 in Figure Ap.5, there had been a mini-truck and a motorbike parked closely in front of the camera. This truck was there for delivering joss papers to the temple and left at 13:01:10, as shown in the snapshot. One minute later, the owner of the parked motorbike was captured coming out of the temple. Before he left, as can be seen in the snapshot captured at 13:02:40, he (a) stayed in the courtyard on his motorbike chatting with the temple administrator (b) for a minute. According to the manner of their conversation, they are very

likely to be related. In addition to the events described above, during this five-minute period, there were also two motorbikes and two individual pedestrians passing through this courtyard, and a group of four young ladies (c), as shown in the snapshot captured at 13:04:50, talking with curiosity about this space for a minute.



13:01:00 (code 9)



13:01:10 (code 9)



13:02:40 (code 10)



13:04:50 (code 11)

Figure Ap.5 Snapshots: codes 9 (13:01:00-13:01:10), 10 (13:02:40), and 11 (13:04:50) (referring to Figure F)

14:00-14:05

Throughout this period, as can be seen in many of the snapshots in Figure Ap.6, there was a young lady (d) sitting on a motorbike, outside the artist's studio, talking on her mobile phone, and also a man (e) reading the temple introduction board on the right-hand side wall. In addition, during the period, there were three motorbikes passing through this courtyard, a group of four young men (f), as shown

in the snapshots captured at 14:00:30 and 14:00:40, walking across the courtyard, and two ladies (i) coming down from Green House restaurant and leaving as a group, as can be seen in the snapshot captured at 14:01:50. Comparing the snapshots in Figures Ap.4, Ap.5 and Ap.6, we can also find that some of the motorbikes parked against the left-hand side wall at midday had left by 2pm.

Furthermore, as can be seen in the snapshots captured at 14:01:50 and 14:02:00, the artist (h), owner of the studio on the far left corner, arrived and parked his motorbike outside his studio. While he was parking, an old man with a meal box (j) passed by and greeted the artist with a smile, and then walked towards the rear of the temple. At the same time, another man (g) moved from the temple towards the artist. A few seconds later, as shown in the snapshots captured at 14:02:30-14:02:40, the old man came out from the rear of the temple and three men started a chat. But only for one or two minutes, after which they left and the artist moved into his studio. According to the temple administrator (I asked her during the filming), the artist did not live here but came to work daily. The other two men were local residents and they knew the artist very well.

The variety of events which occurred in this space at 2pm was greater, compared with what we explored earlier. The types of story include not only pass-through movements, parking and temple visiting, but also talking on a mobile phone, reading the temple introduction board and chatting.



14:00:30 (code 12)



14:00:40 (code 12)



14:01:50 (code 13)



14:02:00 (code 13)



14:02:30 (code 14)



14:02:40 (code 14)

Figure Ap.6 Snapshots: codes 12 (14:00:30-14:00:40), 13 (14:01:50-14:02:00), and 14 (14:02:30-14:02:40) (referring to Figure F)

15:00-15:05

The appropriation of this courtyard during this period was much simpler than what it was at 2pm. As can be seen in both snapshots in Figure Ap.7, there was a mini-truck parked in the courtyard throughout, looking as if it was connected with some maintenance work, and the workers were

elsewhere in the surrounding neighbourhood. There were two women (k) coming down from Green House restaurant and chatting at the far right corner of this courtyard for nearly five minutes before leaving, as can be seen in the snapshots. While they were chatting, there was a visitor (l) leaving the temple at 15:00:50, and also a motorbike passing through the courtyard.



15:00:50 (code 15)



15:03:40 (code 16)

Figure Ap.7 Snapshots: codes 15 (15:00:50) and 16 (15:03:40) (referring to Figure F)

16:00-16:05

An old man (m), as can be seen in all the snapshots in Figure Ap.8, he hobbled to the temple with his own incense, and then worshipped in front of the incense burner. He is very likely a local resident and was conceivably a regular visitor to this temple as we shall see him again at 5am the next day in my observation. In addition to this old man, during this period, there were also two motorbikes and one pedestrian passing through this courtyard.



16:00:30 (code 17)



16:00:40 (code 17)



16:02:30 (code 18)



16:02:40 (code 18)

Figure Ap.8 Snapshots: codes 17 (16:00:30-16:00:40) and 18 (16:02:30-16:02:40) (referring to Figure F)

17:00-17:05

At the beginning of this period, there were two women (n), as can be seen in the snapshots captured at 17:00:30 and 17:00:40 in Figure Ap.9, one with a baby and the other with a pram, leisurely strolling in the courtyard for a minute. At that time, two motorbikes (o and q) were successively parked against the left-hand side wall and then the bikers left for elsewhere. In addition, during this five-minute period, there were five motorbikes and one bicycle passing through this courtyard. Some of them (p and r) can be seen in the snapshots captured at 17:03:50 and 17:04:10. There were also two children (s) riding bikes outside the temple for nearly five minutes and leaving at 17:04:40, as shown. Class was probably just over as these two children were still wearing school uniforms and had school bags.



17:00:30 (code 19)



17:00:40 (code 19)



17:03:50 (code 20)



17:04:00 (code 20)



17:04:10 (code 20)



17:04:40 (code 21)

Figure Ap.9 Snapshots: codes 19 (17:00:30-17:00:40), 20 (17:03:50-17:04:10), and 21 (17:04:40)
(referring to Figure F)

18:00-18:05

As can be seen in the snapshots captured at 18:00:00 in Figure Ap.10, there were two old men sitting on the bench in the temple doorway for a chat, and there was also a secondary-school girl (t) riding a bike across the courtyard. While the old men were still chatting, as shown in the snapshot captured at

18:01:30, there were two more secondary-school girls (u) walking their bikes together across this courtyard. At 18:01:50, a schoolgirl with her mom and a pram with a baby (v) walked across the courtyard, and the old men left the bench at 18:02:00. Then nothing had happened until a man (w) left the temple, as shown in the snapshot captured at 18:03:20, and a woman (x) walked across the courtyard at the same time. Afterwards, there were two motorbikes passing through the courtyard successively. Then at 18:05:00, there were two schoolgirls (y) who walked together across the courtyard.

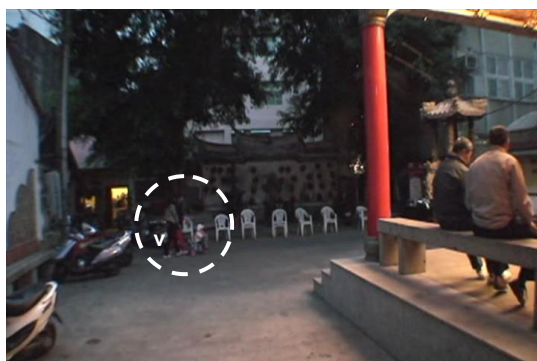
The events which occurred in the courtyard during this period were quite different from what we explored earlier. First, it was first time we have found people sitting on the temple bench for a chat. They might have been there for a while by 6pm. Second, there were many students moving around this place. Then I had noticed, according to my personal observations, that the cafés and bars on the alley to the north of the courtyard were very popular with students at dinner time, and this was probably one of the reasons there were so many students around.



18:00:00 (code 22)



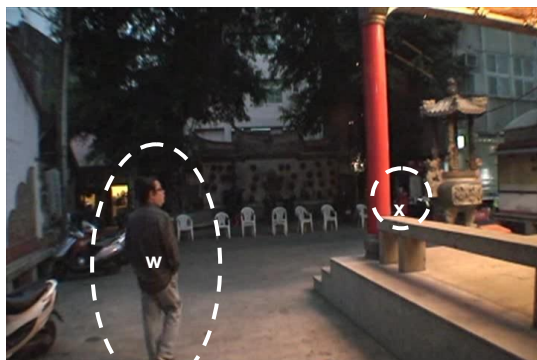
18:01:30 (code 23)



18:01:50 (code 24)



18:02:00 (code 24)



18:03:20 (code 25)



18:05:00 (code 26)

Figure Ap.10 Snapshots: codes 22 (18:00:00), 23 (18:01:30), 24 (18:01:50-18:02:00), 25 (18:03:20), and 26 (18:05:00) (referring to Figure F)

Appropriation of Yonghua Temple Courtyard: Section 3 (19:00-0:00)

19:00-19:05

At the beginning of this period, a group of five people came down from Green House restaurant and walked away from this place. At 19:01:10, as can be seen in the snapshot in Figure Ap.11, a young man (a) walked into the temple, and at the same time, a motorbike (b) for LPG cylinder delivery passed through this courtyard. One minute later, the young man left the temple, as shown in the snapshot captured at 19:02:20. In addition, the school girl with her mom and a pram whom we saw at 6pm walked across this courtyard again.



19:01:10 (code 27)



19:02:20 (code 28)

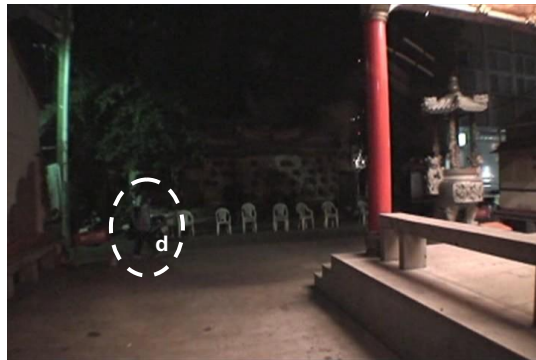
Figure Ap.11 Snapshots: codes 27 (19:01:10) and 28 (19:02:20) (referring to Figure F)

20:00-20:05

The courtyard was relatively quiet at 8pm. During this five-minute period, a person (c) came down from Green House restaurant and left, and a lady (d) walked across the courtyard, as shown in the snapshots in Figure Ap.12. As also can be found, all the motorbikes parked against the left-hand side wall during the day had left and the area returned to its vacant condition as it had been in the morning.



20:02:00 (code 29)



20:04:00 (code 30)

Figure Ap.12 Snapshots: codes 29 (20:02:00) and 30 (20:04:00) (referring to Figure F)

21:00-21:05

During this period, there were a motorbike and a bicycle passing through this courtyard.

22:00-22:05

Yonghua Temple and Green House restaurant were closed at 10pm. During this five-minute period, the artist (e) and the temple administrator (f) shown in the snapshots in Figure Ap.13, and the owner and a waitress of Green House all successively left by motorbike. We can find that all of them had parked their motorbikes in the far left-hand corner outside the artist's studio throughout the day.



22:01:10 (code 31)



22:03:50 (code 32)

Figure Ap.13 Snapshots: codes 31 (22:01:10) and 32 (22:03:50) (referring to Figure F)

23:00-23:05; 0:00-0:05

There were no observable events occurring during these two periods.

Appropriation of Yonghua Temple Courtyard: Section 4 (1:00-6:00)

In this section of observation, nothing had happened until the temple was open at 5am. In both snapshots in Figure Ap.14, the old man (a) we saw earlier at 4pm appeared again and was hobbling away from the temple. Apparently he had visited the temple as early as it was open. Then this place lapsed into silence again.



5:01:40 (code 33)



5:01:50 (code 33)

Figure Ap.14 Snapshots: code 33 (5:01:40-5:01:50) (referring to Figure F)

Appropriation of Zonggan Temple Courtyard: Section 1 (7:00-12:00)

7:00-7:05

At 7:02:10, as the snapshot in Figure Ap.15 shows, a resident (a) of the house next to Wuwen Temple on the left came out, remaining in front of his house and talking to someone inside that house for around one minute. While he was still there, a motorbike (b) passed through the courtyard, as shown in the snapshot captured at 7:03:00. Then the director of Zonggan Temple Management Committee (c) arrived, as can be seen in the other two snapshots (7:04:50 and 7:05:00), and parked his motorbike in front of the temple. He was going to open the temple (both temples around this courtyard are open at 7am daily).



7:02:10 (code 34)



7:03:00 (code 35)



7:04:50 (code 36)



7:05:00 (code 36)

Figure Ap.15 Snapshots: codes 34 (7:02:10), 35 (7:03:00), and 36 (7:04:50-7:05:00) (referring to Figure G)

8:00-8:05

During this five-minute period, there were two people (d), as can be found in the snapshots captured at 8:00:20 and 8:00:50 in Figure Ap.16, repeatedly moving some goods into Wuwen Temple throughout. They were probably replenishing the stock. In addition, there were two motorbikes (e and f) passing through this courtyard, respectively at 8:02:30 and at 8:04:50, as shown in the other two snapshots. It is observable that the circulation of pass-through traffic in this courtyard was rather diverse as each corner has one or two alleys that connect this courtyard space with the streets on all sides of the block (see Figure 5.20).



8:00:20 (code 37)



8:00:50 (code 38)



8:02:30 (code 39)



8:04:50 (code 40)

Figure Ap.16 Snapshots: codes 37 (8:00:20), 38 (8:00:50), 39 (8:02:30), and 40 (8:04:50) (referring to Figure G)

9:00-9:05

The grocery store next to Zonggan Temple has just opened. During this period, there were two individual women who walked across the courtyard towards the alley behind the camera that leads to the traditional market. One of them (g) is shown in the snapshots captured at 9:00:50 and 9:01:00 in Figure Ap.17. Then there was a bicycle (h) passing through the courtyard towards the same alley at 9:02:10, as shown. They were probably all going to the market. In addition to the above movements, there was also a motorbike (i) passing through the courtyard, as can be found in the other snapshot (9:03:50).



9:00:50 (code 41)



9:01:00 (code 41)



9:02:10 (code 42)



9:03:50 (code 43)

Figure Ap.17 Snapshots: codes 41 (9:00:50-9:01:00), 42 (9:02:10), and 43 (9:03:50) (referring to Figure G)

10:00-10:05

At the beginning of this period, there were two people talking outside the LPG supplier in the corner for around thirty seconds. Then, during this five-minute period, there were four motorbikes successively passing through this courtyard with various paths and directions. By the end of the period, as can be seen in both snapshots in Figure Ap.18, the owner of the grocery store (j) was packing something onto his motorbike preparing to go somewhere.



10:04:40 (code 44)



10:04:50 (code 44)

Figure Ap.18 Snapshots: code 44 (10:04:40-10:04:50) (referring to Figure G)

11:00-11:05

In the snapshots captured at 11:01:20 and 11:01:30, in Figure Ap.19, there was a woman (k) walking across the courtyard. As she came from the alley that leads to the market and was carrying some bags of fresh ingredients and foods, presumably she had just finished shopping at the market. Then, as can be seen in the snapshots captured at 11:01:50 and 11:02:00, a woman (l) with a pram moved into the grocery store. Two minutes later, a man (m) walked into this courtyard and worshipped outside both temples one after the other. In the snapshots (11:04:00 and 11:04:10), he was piously worshipping in front of Zonggan Temple. In addition to the events mentioned above, there were three motorbikes passing through this courtyard successively during the period.



11:01:20 (code 45)



11:01:30 (code 45)



11:01:50 (code 46)



11:02:00 (code 46)



11:04:00 (code 47)



11:04:10 (code 47)

Figure Ap. 19 Snapshots: codes 45 (11:01:20-11:01:30), 46 (11:01:50-11:02:00), and 47 (11:04:00-11:04:10) (referring to Figure G

12:00-12:05

There were numerous movements of pass-through traffic captured during this period, including nine motorbikes and three pedestrians. The people involved in these movements did not enter houses or stay at any places around the courtyard but just passed through. Some of them are shown in Figure Ap.20. As can be seen in the snapshot captured at 12:02:40, a woman (n) was walking across the courtyard towards the alley that leads to the traditional market, and in the snapshot captured at 12:03:00, another woman (p) has just left the market for home. Then the snapshot captured at 12:04:20 shows a motorbike (q) passing through the courtyard and a man (r) walking across the courtyard. In addition to these movements, there was a young man (o) who walked into the courtyard at 12:02:40, and then moved to his motorbike that was already parked outside the seafood bar and

stayed on his motorbike, as can be found in all the snapshots in Figure Ap.20. He was probably waiting for someone. There was also a man visiting the grocery store, and at 12:05:00, the woman (s) with a pram captured at 11am appeared again in the scene moving away from the grocery store.



12:02:40 (code 48)



12:03:00 (code 49)



12:04:20 (code 50)



12:05:00 (code 51)

Figure Ap.20 Snapshots: codes 48 (12:02:40), 49 (12:03:00), 50 (12:04:20), and 51 (12:05:00)
(referring to Figure G)

Appropriation of Zonggan Temple Courtyard: Section 2 (13:00-18:00)

13:00-13:05

At the beginning of this period, a young man walked across the courtyard to the grocery store, and also a man rode to the house next to the LPG supplier and left his motorbike outside. One minute later,

three old men walked into the courtyard from the alley between Wuwen Temple and the LPG supplier and stayed in front of the temple for a chat. By the end of the five-minute period, as can be seen in both snapshots in Figure Ap.21, these three people (a) were still chatting outside Wuwen Temple, and at the same time the man (b) visiting the house next to the LPG supplier a few minutes earlier was preparing to leave on his motorbike.



13:04:40 (code 52)



13:04:50 (code 52)

Figure Ap.21 Snapshots: code 52 (13:04:40-13:04:50) (referring to Figure G)

14:00-14:05

During this period, the video captured numerous movements that passed through this courtyard space, including ten motorbikes, one bicycle and one pedestrian. Some of them are shown in the snapshots in Figure Ap.22. The snapshot captured at 14:00:30 shows a woman (c) walking across the courtyard towards the alley that leads to the market. Then the snapshot captured at 14:03:30 shows two motorbikes (d) passing through the courtyard.



14:00:30 (code 53)



14:03:30 (code 54)

Figure Ap.22 Snapshots: codes 53 (14:00:30) and 54 (14:03:30) (referring to Figure G)

15:00-15:05

During this period, there were two motorbikes and one pedestrian successively passing through this courtyard. Also a resident living in the house next to Wuwen Temple left on a motorbike. As can be found in the snapshot captured at 15:03:50, shown in Figure Ap.23, one motorbike (f) was passing through the courtyard, and the resident living next to Wuwen Temple (e) was preparing to go. Then in another snapshot (15:04:30), an old man (g) was walking across the courtyard, and the resident (e) was leaving.



15:03:50 (code 55)



15:04:30 (code 56)

Figure Ap.23 Snapshots: codes 55 (15:03:50) and 56 (15:04:30) (referring to Figure G)

16:00-16:05

As Figure Ap.24 shows, throughout this period, there were two people chatting under the tree in the courtyard. Both (h) were initially sitting on the flowerbed side under the tree with their motorbike to one side, as can be seen in the snapshot captured at 16:00:30. Then one of them was sitting on the motorbike preparing to leave, as can be found in the other snapshots. Since they came here by motorbike, they were probably not local residents. In addition to these two people, as shown in the snapshots, there was a man (i) who kept looking around outside Zonggan Temple throughout. The temple was open but he did not go in. He seemed very interested in the exterior maintenance and construction of this temple.

In the snapshot captured at 16:00:30, we can also see two people (j) who were walking across the courtyard towards the alley that leads to the market, and one motorbike (k) was passing through the courtyard at the same time. Including this motorbike, there were only two motorbikes passing through this space during the five-minute period. Then at 16:03:40, as shown in the snapshot, a man who worked at the LPG supplier (l) came back and left his motorbike laden with LPG cylinders outside. At the same time, a woman (m) outside the seafood bar was waiting for something (the arrival of a small van, as we shall see). A few seconds later, as shown in the snapshots captured at 16:03:50 and 16:04:00, a small van (n) came into this courtyard and parked in front of the seafood bar. Then the driver and the woman started to carry some goods from the van into the bar. They were probably preparing to open the bar.



16:00:30 (code 57)



16:03:40 (code 58)



16:03:50 (code 58)



16:04:00 (code 58)

Figure Ap.24 Snapshots: codes 57 (16:00:30) and 58 (16:03:40-16:04:00) (referring to Figure G)

17:00-17:05

In the snapshots in Figure Ap.25, we can see that by 5pm there were many tables placed over the courtyard space by the seafood bar. These tables were substantially separated into two groups. One group was placed in front of Zonggan Temple and the grocery store, and the other was near the tree; this was so the traffic could pass through from the gap between these two groups of tables. In addition, we can also find that there were many motorbikes parked in front of the video camera, and most of them were not here in the earlier observations. At 17:00:00, as can be seen, a worker (o) at the seafood bar was also parking his motorbike here. This seafood bar is open daily from 6pm to midnight, and, according to this observation, the workers seem to arrive around 5pm daily. The increased number of motorbikes in front of the camera were probably owned by the workers, because, as we shall see, they were here throughout the opening hours of the bar and disappeared after midnight.

As can also be seen in the snapshot captured at 17:00:00, there were three people (p) staying outside the LPG supplier for a chat. One of them was on a motorbike and rode away after one minute. One with a pram (u) walked away at 17:02:50, while the other one moved into the grocery store.

At this time, the staff of the seafood bar started to have dinner. As can be found in the snapshots, they were sitting at the table (r) near Zonggan Temple. At 17:01:40, a worker (q) at the bar had just arrived on foot and quickly joined the others. During this five-minute period, there were three motorbikes and six individual pedestrians passing through this courtyard. Some of them are shown in the snapshots. The snapshot captured at 17:01:40 shows a woman (s) walking across the courtyard, and the snapshot captured at 17:02:30 shows two motorbikes (t) passing through the gap between the tables of the seafood bar.



17:00:00 (code 59)



17:01:40 (code 60)



17:02:30 (code 61)



17:02:50 (code 62)

Figure Ap.25 Snapshots: codes 59 (17:00:00), 60 (17:01:40), 61 (17:02:30), and 62 (17:02:50)
(referring to Figure G)

18:00-18:05

By 6pm in the courtyard, there were already some people sitting at the tables of the seafood bar near Zonggan Temple and the grocery. As can be seen in the snapshot captured at 18:00:40 in Figure Ap.26, there was a young couple (v) walking across the courtyard. They were going to the seafood bar to get takeaway food. After them, there were two more people successively coming for takeaway food. At the same time, there were also many people visiting the grocery store. There were two visitors walking away from the grocery store, and one man parking his motorbike on the area near my camera where there had been many motorbikes parked while their owners were visiting the grocery store. One of the visitors walking away from the grocery store (x) is shown in the snapshot captured at 18:02:20, and in the snapshot captured at 18:03:50, a visitor with a motorbike (z) was parking.

The courtyard was busy during this five-minute period. The waiters and waitresses kept moving around the space, while visitors and other movements passed through continuously. In the snapshot captured at 18:02:20, a waitress (y) was standing in the centre of the courtyard among the movements. Excluding the visitors to the grocery store and the seafood bar, there were six motorbikes and five pedestrians successively passing through this space. Some of them (w) are shown in the snapshots

(18:01:20 and 18:02:20). In addition, there were two young men who parked their motorbike behind the tree (near Wuwen Temple) and walked across the courtyard to visit Zonggan Temple.



18:00:40 (code 63)



18:01:20 (code 64)



18:02:20 (code 65)



18:03:50 (code 66)

Figure Ap.26 Snapshots: codes 63 (18:00:40), 64 (18:01:20), 65 (18:02:20), and 66 (18:03:50)

(referring to Figure G)

Appropriation of Zonggan Temple Courtyard: Section 3 (19:00-0:00)

19:00-19:05

There were more visitors to the seafood bar at 7pm. In the snapshots in Figure Ap.27, we can see that the tables near Zonggan Temple and the grocery store were fully occupied, and a table near the tree was also occupied. In the snapshot captured at 19:00:00, there was a child (a) with a folding kick

scooter passing through the courtyard space. In another snapshot, we can see waitresses (b) moving around the courtyard serving customers. During this period, there were two motorbikes successively passing through the courtyard. Also two individuals walked across the courtyard, and one man walked to the seafood bar for takeaway food.



19:00:00 (code 67)



19:03:00 (code 68)

Figure Ap.27 Snapshots: codes 67 (19:00:00) and 68 (19:03:00) (referring to Figure G)

20:00-20:05

There were still many people sitting at the tables of the seafood bar in the courtyard at 8pm. As can be seen in the snapshots in Figure Ap.28, one table near Zonggan Temple and two tables near the tree were occupied. In the snapshot captured at 20:02:50, the child (c) with the folding kick scooter we saw earlier at 7pm passed through this courtyard again with his scooter. At the same time, there was also a motorbike (d) passing through the courtyard. It was the only motorbike passing through this space during this five-minute period of observation. In the same image, the people (e) at the table near Zonggan Temple were leaving, and also one man (f) with takeaway food came out from the seafood bar. A few seconds later, in another snapshot, we can see that there were two people (g) preparing to leave by motorbike outside the seafood bar. They were from the people sitting at the table near Zonggan Temple earlier. In addition to the movements mentioned above, there were only a couple walking across the courtyard during this period.



20:02:50 (code 69)



20:03:20 (code 70)

Figure Ap.28 Snapshots: codes 69 (20:02:50) and 70 (20:03:20) (referring to Figure G)

21:00-21:05

As can be seen in the snapshots in Figure Ap.29, one table near Zonggan Temple and one table near the tree in the courtyard were occupied at 9pm. At 21:00:00, there was a motorbike (h) passing through the courtyard. In fact there were only two motorbikes passing through this space during the five-minute period. At the same time (21:00:00), the owner of the grocery store (i) was walking to Wuwen Temple. He stayed in the temple for around two minutes and then returned to the store. In the snapshot captured at 21:03:40, a man (j) was standing outside the seafood bar waiting for his takeaway food.



21:00:00 (code 71)



21:03:40 (code 72)

Figure Ap.29 Snapshots: codes 71 (21:00:00) and 72 (21:03:40) (referring to Figure G)

22:00-22:05

By 10pm, both Zonggan Temple and Wuwen Temple were closed. The courtyard is almost tidied up, although the seafood bar was still open (from 6pm to midnight). As can be found in the snapshots in Figure Ap.30, in the courtyard, only two tables near Zonggan Temple remained. But in fact there were no visitors to the seafood bar at this moment. All the people sitting at these two tables in the courtyard in the snapshots were the staff of the bar, the director of Zonggan Temple Management Committee and his friends (possibly members of the committee).

Throughout this period, as can be seen in the snapshots, outside the grocery store there was an old man (k) continuously packing something, which looked like recycled boxes collected from the grocery store, onto his bike to take away. In this five-minute period, not many events occurred apart from the people sitting at the tables and this old man. Only at 22:00:40, a lady (l) visited the grocery store. Then at 22:04:30, a bicycle (m) slowly moved across the courtyard.



22:00:40 (code 73)



22:04:30 (code 74)

Figure Ap.30 Snapshots: codes 73 (22:00:40) and 74 (22:04:30) (referring to Figure G)

23:00-23:05

As can be seen in the snapshots in Figure Ap.31, the seafood bar and the grocery were still open. At 11:00:00, the people who had been sitting at the tables near Zonggan Temple at 10pm were still sitting

there. But some of them were about to leave. As can be seen in the snapshot captured at 23:05:00, many people were leaving on their motorbikes. These people were friends of the director of Zonggan Temple Management Committee. The director was the one standing in the centre of the scene watching them leave. He went back a few seconds later to join the staff members of the seafood bar at the tables for more drinks.



23:00:00 (code 75)



23:05:00 (code 76)

Figure Ap.31 Snapshots: codes 75 (23:00:00) and 76 (23:05:00) (referring to Figure G)

0:00-0:05

At midnight, as can be found in both snapshots in Figure Ap.32, the space was quiet. But there was an old couple sitting on the flowerbed side under the tree in the courtyard for a date. A few minutes later, as can be seen in the snapshot captured at 0:02:20, they hugged each other before leaving. Then the woman and the man respectively rode a motorbike and a bicycle away, as shown in the snapshot captured at 0:04:30.



0:02:20 (code 77)



0:04:30 (code 78)

Figure Ap.32 Snapshots: codes 77 (0:02:20) and 78 (0:04:30) (referring to Figure G)

Appropriation of Zonggan Temple Courtyard: Section 4 (1:00-6:00)

Almost nothing occurred during this section of observations except for a motorbike passing through the courtyard at 5am and another at 6am.

Appropriation of Haian Temple Courtyard: Section 1 (7:00-12:00)

7:00-7:05

As can be seen in the snapshot captured at 7:00:30, in Figure Ap.33, there was a woman wearing pyjamas and slippers hobbling to the temple. According to the original video (also the successive snapshots in Figure H1), it took her about one minute to walk across this distance of 20 metres from the position of the camera to the temple. She was very likely to be a local resident and a regular visitor to the temple. Then at 7:04:30, a bicycle came out from the alley on the left (to the side of the temple management committee office) and passed through this courtyard.



7:00:30 (code 79)



7:04:30 (code 80)

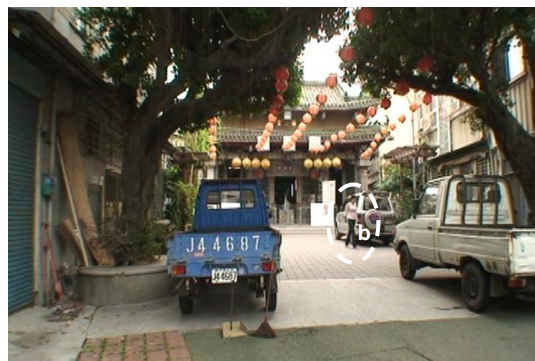
Figure Ap.33 Snapshots: codes 79 (7:00:30) and 80 (7:04:30) (referring to Figure H)

8:00-8:05

At 8:00:00, as Figure Ap.34 shows, a woman (a) was walking across the courtyard to the temple. Then nothing was captured until a woman (b) returned home (on the right-hand side behind the parked white mini-truck) at 8:04:30 from the temple. According to the snapshots, it is observable that the white saloon parked in front of the camera at 7am had disappeared by 8am. It was driven to work (it returned, driven by a young professional woman, at 6pm, as we shall see).



8:00:00 (code 81)



8:04:30 (code 82)

Figure Ap.34 Snapshots: codes 81 (8:00:00) and 82 (8:04:30) (referring to Figure H)

9:00-9:05

During this period, an old man parked his cargo tricycle on the right-hand side of the courtyard behind the white mini-truck and loaded onto his tricycle some large cartons which had been dumped outside the house on the left-hand side behind the tree. At the same time, the director of the temple management committee rode a bicycle from his office passing through the courtyard to leave, as shown in the snapshot captured at 9:01:50 in Figure Ap.35. Then, as shown in another snapshot, the old man left with his tricycle at 9:03:00.



9:01:50 (code 83)



9:03:00 (code 84)

Figure Ap.35 Snapshots: codes 83 (9:01:50) and 84 (9:03:00) (referring to Figure H)

10:00-10:05

Nothing was captured during this period.

11:00-11:05

In Figure Ap.36, there had been a cargo tricycle (different from the one coming at 9am) parked on the right-hand side of the courtyard behind the white mini-truck by 11am. As can be seen in the snapshot captured at 11:00:50, a woman (c) rode a bicycle into this courtyard and parked it behind the cargo tricycle. Then she walked into the temple. Two minutes later, she came out together with the temple administrator (d), as shown in the snapshot captured at 11:02:40. They then stayed by the side of her bicycle for a long chat, which was still going on by the end of this five-minute observation. While

they were chatting, as the snapshots show, there was a woman (e) who walked from the alley on the left (to the side of the temple management committee office) across the courtyard towards the temple at 11:03:00, and a postman with a motorbike (f) coming into the courtyard at 11:04:10 for mail delivery. In addition, there were also three motorbikes passing through this courtyard successively during this period.



11:00:50 (code 85)



11:02:40 (code 86)



11:03:00 (code 87)



11:04:10 (code 88)

Figure Ap.36 Snapshots: codes 85 (11:00:50), 86 (11:02:40), 87 (11:03:00), and 88 (11:04:10)

(referring to Figure H)

12:00-12:05

At the beginning of this period, a woman with a little boy (her grandson) walked out from the temple across the courtyard, as shown in the snapshot captured at 12:00:20 in Figure Ap.37, to meet friends who were chatting behind my camera position. Then at 12:02:10, when the director of temple

management committee (g) walked across the courtyard towards his office, a woman with her grandson returned home (on the right-hand side behind the white mini-truck) by motorbike. After parking her motorbike, as shown in the snapshot captured at 12:02:40, this woman with her grandson walked to join the people who were chatting behind my camera. In the snapshot captured at 12:02:50, the two little boys were happy together while their grandmothers were chatting behind my camera. In addition to the events mentioned above, during this period there were two motorbikes passing through the courtyard.



12:00:20 (code 89)



12:02:10 (code 90)



12:02:40 (code 91)



12:02:50 (code 91)

Figure Ap.37 Snapshots: codes 89 (12:00:20), 90 (12:02:10), and 91 (12:02:40-12:02:50) (referring to Figure H)

Appropriation of Haian Temple Courtyard: Section 2 (13:00-18:00)

13:00-13:05

As shown in the snapshot captured at 13:03:20 in Figure Ap.38, a lady (a) came out from her home on the right-hand side behind the parked van and walked across the courtyard to the alley on the left. Then in another snapshot (13:04:30), a child with a yo-yo walked across the courtyard. In addition to these two people, there were also a motorbike and a man passing through this courtyard during this period.



13:03:20 (code 92)



13:04:30 (code 93)

Figure Ap.38 Snapshots: codes 92 (13:03:20) and 93 (13:04:30) (referring to Figure H)

14:00-14:05

At the beginning of this period, a visitor was reversing a black saloon to get out of this place, as shown in the snapshots (14:00:00 and 14:00:10) in Figure Ap.39. There was no space for making a U-turn in the courtyard and the alleys near the temple were too narrow to be accessed by cars. A few minutes later, as shown in the other snapshots (14:02:50 and 14:03:00), two residents came out from the house on the right-hand side behind the white mini-truck and left by motorbike. In addition to the events mentioned, there was also a young man who walked across the courtyard.



14:00:00 (code 94)



14:00:10 (code 94)



14:02:50 (code 95)



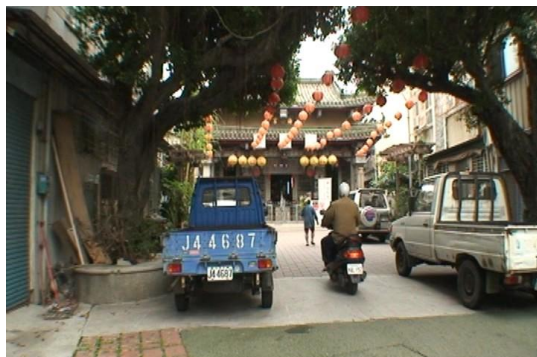
14:03:00 (code 95)

Figure Ap.39 Snapshots: codes 94 (14:00:00-14:00:10) and 95 (14:02:50-14:03:00) (referring to Figure H)

15:00-15:05

At the beginning of this period, an old man, a local resident, came out of the temple and walked across the courtyard to go home. A few seconds later, as shown in the snapshots (15:00:30 and 15:00:40) in Figure Ap.40, a woman resident of the house on the left-hand side behind the tree walked from her home to the temple, and at the same time a man visited the temple leaving his motorbike parked in front of the temple. Two minutes later, a lady who lived in a house behind the camera rode a motorbike passing through the courtyard and the alley to the side of the temple management committee office to get out of this block. Then as can be seen in the snapshot captured at 15:03:30, the man with the motorbike who had just entered the temple came out with another man and they left together on his motorbike. A few seconds later, the temple administrator came out and sat on the step

outside the temple for a rest, as shown in the snapshot captured at 15:04:20. She was still sitting there by the end of this five-minute observation.



15:00:30 (code 96)



15:00:40 (code 96)



15:03:30 (code 97)



15:04:20 (code 98)

Figure Ap.40 Snapshots: codes 96 (15:00:30-15:00:40), 97 (15:03:30) and 98 (15:04:20) (referring to Figure H)

16:00-16:05

At the beginning of this period, a little boy and a little girl had been playing outside the temple, and one minute later, the temple administrator came to sit by the side of them for a rest. As shown in the snapshot captured at 16:01:10 in Figure Ap.41, the temple administrator, sitting on the step, was watching the children (b) playing. Class was probably just over as these two children were still wearing their primary-school uniform. While the children were still playing, a woman resident of the house on the right-hand side behind the white mini-truck went home from the temple for a minute and

then walked back to the temple. Also, at 16:02:40, as shown in the snapshot, a boy with a school bag rode a bicycle passing through the courtyard. He appeared to be going home from school. Two minutes later, a man came out together with the director of the temple management committee from his office. This man (c) walked away through the courtyard, and the committee director (d) walked into the temple, as shown in the snapshots (16:04:30 and 16:04:40). At the same time, as also can be seen, the two children left the courtyard happily with small bikes. In the snapshot captured at 16:04:40, there was also a woman (e) walking across the courtyard behind the children, and the temple administrator was still sitting on the step outside the temple.



16:01:10 (code 99)



16:02:40 (code 100)



16:04:30 (code 101)



16:04:40 (code 101)

Figure Ap.41 Snapshots: codes 99 (16:01:10), 100 (16:02:40) and 101 (16:04:30-16:04:40) (referring to Figure H)

17:00-17:05

At the beginning of this period, the temple administrator had been sitting on the step outside the temple, but she moved into the temple after two minutes. As can be seen in the snapshot captured at 17:00:00, in Figure Ap.42, except for the temple administrator sitting outside the temple, there were two women chatting in the courtyard, and two little girls playing with a small bicycle. These two women were local residents and one of them was a resident of the house on the right-hand side behind the white mini-truck. They stayed in the courtyard for a long chat, which was still going on by the end of this five-minute observation. The two children then moved to the area outside the temple. As can also be seen in the same snapshot, there was a man who walked across the courtyard.

A few minutes later, there was a woman with slippers walking across the courtyard. Then by the end of this observation period, as can be seen in the snapshot captured at 17:04:50, one more girl joined the two little girls. These three children happily walked away through the courtyard, but not with their bike. It was probably forgotten outside the temple, or they would return to the temple later. In the same snapshot, there was also a man walking across the courtyard behind the girls, and the two women were still chatting behind the white mini-truck.



17:00:00 (code 102)



17:04:50 (code 103)

Figure Ap.42 Snapshots: codes 102 (17:00:00) and 103 (17:04:50) (referring to Figure H)

18:00-18:05

At the beginning of this period, there was a man strolling outside the temple. Then a brother and sister who lived in the house on the left-hand side of my camera position arrived home from work at the same time. As shown in the snapshots (18:03:30-18:03:40), in Figure Ap.43, the brother arrived home on a motorbike and the sister drove a white saloon home. In addition, there were four motorbikes and one bicycle passing through this courtyard during this five-minute period. According to the earlier observation of this courtyard's appropriation during the day (7am-5pm), there was hardly a motorbike passing through the courtyard. Clearly there was relatively more pass-through traffic of motorbikes at 6pm and this was probably because it was time for going home from work.



18:03:30 (code 104)



18:03:40 (code 104)

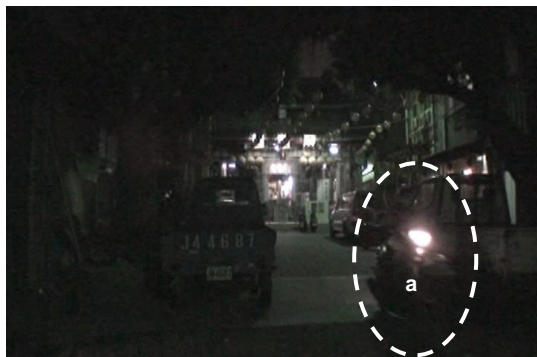
Figure Ap.43 Snapshots: code 104 (18:03:30-18:03:40) (referring to Figure H)

Appropriation of Haian Temple Courtyard: Section 3 (19:00-0:00)

19:00-19:05

There had been two motorbikes already parked in front of the temple by 7pm. It appeared that they belonged to visitors in the temple. During this period, there was a motorbike (a) passing through the courtyard, as shown in the snapshot captured at 19:03:20 in Figure Ap.44. Also a lady who lived in a

house nearby the temple walked into the temple, and then returned home after two minutes. Another snapshot (19:04:30) shows her (b) going home from the temple.



19:03:20 (code 105)



19:04:30 (code 106)

Figure Ap.44 Snapshots: codes 105 (19:03:20) and 106 (19:04:30) (referring to Figure H)

20:00-20:05

During this period, there were three men who kept walking around in the courtyard. Two of them were residents of the house on the right-hand side behind the white mini-truck. They repeatedly walked from their home to the temple and returned a few times. In addition, there were also two motorbikes passing through this courtyard, and one of them is shown in the snapshot (20:03:30) in Figure Ap.45. The men walking around in the courtyard (c) can be found in another snapshot captured at 20:04:10.



20:03:30 (code 107)



20:04:10 (code 108)

Figure Ap.45 Snapshots: codes 107 (20:03:30) and 108 (20:04:10) (referring to Figure H)

21:00-21:05

There had been three motorbikes already parked in front of the temple by 9pm. This suggested that there were again some visitors in the temple. Throughout this period in the courtyard, there was nothing except for, as shown in both snapshots in Figure Ap.46, a little boy and a little girl (d) playing and running excitedly. They were likely to be the children of the visitors in the temple.



21:01:30 (code 109)

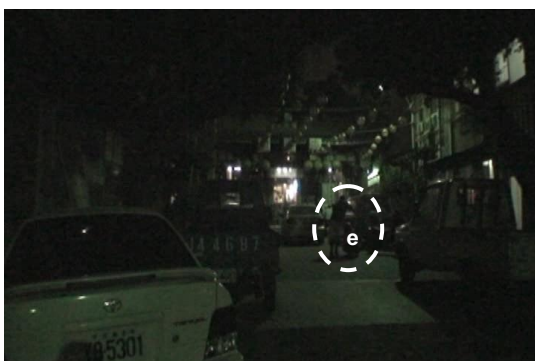


21:01:40 (code 109)

Figure Ap.46 Snapshots: code 109 (21:01:30-21:01:40) (referring to Figure H)

22:00-22:05

By 10pm, there had already been a saloon parked in front of the temple. The temple was about to be closed at this time. Throughout this period, the owners of the saloon and a staff member of the temple stayed on one side of the saloon outside the temple for a chat, as shown in both snapshots in Figure Ap.47. It appeared that the owners of this saloon were frequent visitors to the temple and knew the temple staff quite well. While they were chatting, as can be seen in the snapshot captured at 22:01:40, a man (e) who lived in the house on the right-hand side behind the white mini-truck came out to move his motorbike into the house. The temple was closed at 22:03:00, although the light was still on, as can be found in another snapshot.



22:01:40 (code 110)



22:03:00 (code 111)

Figure Ap.47 Snapshots: codes 110 (22:01:40) and 111 (22:03:00) (referring to Figure H)

23:00-23:05

At 11pm in the courtyard, nothing had happened until, as shown in both snapshots in Figure Ap.48, two men (f) came out from the house on the right-hand side behind the white mini-truck and left on a motorbike. Then the space lapsed into silence again.



23:04:20 (code 112)



23:04:30 (code 112)

Figure Ap.48 Snapshots: code 112 (23:04:20-23:04:30) (referring to Figure H)

0:00-0:05

Nothing was captured during this period.

Appropriation of Haian Temple Courtyard: Section 4 (1:00-6:00)

In this section of observation, nothing happened until the temple was opened at 6am. Throughout the five-minute period of observation at 6am, as can be seen in both snapshots shown in Figure Ap.49, in the quiet courtyard, the temple administrator continuously walked around for exercise. According to her (I asked her after filming), she repeated this exercise daily for 20-30 minutes after opening the temple.



6:02:40 (code 113)



6:03:10 (code 114)

Figure Ap.49 Snapshots: codes 113 (6:02:40) and 114 (6:03:10) (referring to Figure H)

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